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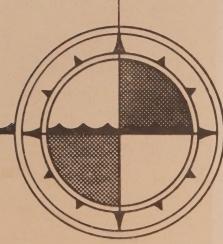




# OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P 19 October - 6 December 1979 VOLUME 104



INSTITUTE OF OCEAN SCIENCES Sidney, B.C.



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OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P

19 October - 6 December 1979

VOLUME 104

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1981



#### ABSTRACT

Physical, chemical and biological oceanographic observations are made from the weathership at Ocean Weather Station Papa, and between Esquimalt and Station Papa, on a routine continuing basis. Physical oceanography data only are shown, including surface observations and profiles obtained with bottle casts and conductivity-temperature-pressure instruments.

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#### INTRODUCTION

Canadian operation of Ocean Weather Station P (Latitude 50°00'N, Longitude 145°00'W) was inaugurated in December 1950. The station is occupied primarily to make meteorological observations of the surface and upper air and to provide an air-sea rescue service. The station is manned by two vessels operated by the Marine Services Branch of the Ministry of Transport. They are the CCGS Vancouver and the CCGS Quadra. Each ship remains on station for a period of six weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch.

Bathythermograph observations have been made at Station P since July 1952. A program of more extensive oceanographic observations commenced in August 1956. This was extended in April 1959 by the addition of a series of oceanographic stations along the route to and from Station P and Swiftsure Bank. These stations are known as Line P stations. The number of stations on Line P has been increased twice and now consists of twelve stations (Fig. 1). Bathythermograph observations and surface salinity sample collections, in addition to being made on Line P oceanographic stations, are also made at odd meridians at 40', i.e. 139 40'W, 141 40'W, etc. These stations are known as Line P BT stations. Data observed prior to 1968 have been indexed by Collins et al (1969).

The present record includes hydrographic, continuously sampled STD and surface salinity and temperature data collected from the CCGS Quadra during the period 19 October - 6 December 1979.

All physical oceanographic data have been stored by the Marine Environmental Data Services Branch (MEDS), Department of Fisheries and Oceans, 240 Sparks Street, 7th Floor West, Ottawa, Ontario, Canada, K1A OE6. Requests for these data should be directed to MEDS.

Biological and productivity data are published in the Manuscript Report series of the Department of Fisheries and Oceans (DFO), Pacific Biological Station, Nanaimo, British Columbia, Canada. Requests for these data should be directed to DFO.

Marine geochemical data are for the Ocean Chemistry Division, Department of Fisheries and Oceans, Institute of Ocean Sciences, P.O. Box 6000, Sidney, B. C., Canada, V&L 4B2.

# PROGRAM OF OBSERVATION FROM CCGS QUADRA, 19 October - 6 December 1979 (P-79-8) (MEDS Ref. No. 15-79-008)

Oceanographic observations were made by Mr. B. Canning.

# En Route to Station P (Line P)

STD profiles were taken at Line P stations 3 to 8.

At station 6 a hydrocast was also taken to 1200 metres for temperature and salinity.

Surface salinity and nutrient samples were taken from the seawater loop or bucket.

The surface temperature recorder (engine intake) and thermosalinograph (seawater loop) were run continuously.

XBT's were taken at stations 1, 2,  $5\frac{1}{2}$ ,  $6\frac{1}{2}$ ,  $7\frac{1}{2}$ ,  $8\frac{1}{2}$ , 9 and  $11\frac{1}{2}$ .

#### On Station P

The oceanographic program was carried out as follows:

# Physical Oceanography

- Two hydrocasts to 4200 metres for temperature, salinity and oxygen. Three hydrocasts to 1500 metres for temperature, salinity and oxygen. Four hydrocasts to 1500 metres for temperature and POC (Particulate Organic Carbon).

  One hydrocast to 500 metres for tritium.

  Two hydrocasts to 75 metres for plant pigments.
- 2) Sixty-six STD profiles were taken at Station P. Fifteen STD profiles were taken at MILE GRID positions.
- 3) Daily salinity samples were taken from the seawater loop at 0000 hours, GMT.
- 4) The regular 3-hourly BT observations were deleted during this cruise. The temperature profiles only of all STD's taken at Station P were digitized and transmitted according to the IGOSS format.

#### Marine Geochemistry

Samples for air  ${\rm CO_2}$ ,  ${\rm PCO_2}$ ,  ${\rm PCO_2}$ ,  ${\rm PCO_2}$ , alkalinity, nutrients and tritium obtained during this cruise are for the Ocean Chemistry Division and are not included in this data report.

#### Biological Oceanography

Samples from 150 metre vertical plankton hauls (Station P) and nutrients (Line P) obtained during this cruise are for the Pacific Biological Station and are not included in this data report.

# En Route from Station P (Line P)

STD profiles were taken at Line P stations 1 to 12.

Surface salinity and nutrient samples were taken from the seawater loop or bucket.

The surface temperature recorder (engine intake) and thermosalinograph (seawater loop) were run continuously.

XBT's were taken at stations  $12\frac{1}{2}$ ,  $11\frac{1}{2}$ ,  $10\frac{1}{2}$ ,  $9\frac{1}{2}$ ,  $8\frac{1}{2}$ ,  $7\frac{1}{2}$ ,  $6\frac{1}{2}$  and  $5\frac{1}{2}$ .

#### Observations for Other Agencies

- 1) Marine mammal observations were made by the ship's officers for Mr. M. Bigg, Department of Fisheries and Oceans, Pacific Biological Station, Nanaimo, British Columbia, Canada.
- 2) Bird observations were made by the ship's officers for Dr. M. Myres, University of Alberta, Calgary, Alberta, Canada and Mr. J. Guiget, Curator of Birds and Mammals, Provincial Museum, Department of Provincial Secretary and Travel Industry, Victoria, British Columbia, Canada.

#### OBSERVATIONAL PROCEDURES

Observations for salinity, oxygen and temperature and all hydrographic casts, including the surface, were obtained with Niskin water sample bottles equipped with either Richter and Wiese and/or Yoshino Keiki Co. reversing thermometers. Two protected thermometers were used on all bottles and one unprotected thermometer was used on each bottle at depths of 300 metres or greater. The accuracy of protected reversing thermometers is believed to be  $\pm 0.02^{\circ}$ C.

The daily surface water temperatures were measured from a bucket sample using a deck thermometer of  $\pm 0.1^{\circ}$  C accuracy. The daily surface salinity samples were obtained from the seawater loop. When the seawater loop was not operational these samples were obtained with a bucket, and are indicated with a 'b' in this data record.

Salinity determinations were made aboard ship with either an Autolab Model 601 Mark III inductive salinometer or a Hytech Model 6220 lab salinometer. Accuracy using duplicate determinations is estimated to be  $\pm 0.003^{\circ}/\text{oo}$ .

Depth determinations were made using the "depth difference" method described in the U.S.N. Hydrographic Office Publication No. 607 (1955). Depth estimates have an approximate accuracy of  $\pm 5$  metres for depths less than 1000 metres, and  $\pm 0.5\%$  of depth for depths greater than 1000 metres.

The dissolved oxygen analyses were done in shipboard laboratory by a modified Winkler method (Carpenter, 1955).

Line P engine intake continuous temperature on both ships was recorded by a Honeywell Electronik 15 Recorder. The temperature probe is at a depth of approximately 3 metres below the sea surface and the instrument accuracy is believed to be  $\pm 0.1^{\circ}$  C.

Each ship is equipped with a Plessey Model 6600-T thermosalinograph which is used, on Line P, for continuous recording of surface temperatures and salinities from the ship's seawater loop. The temperature probe is mounted at the seawater loop intake (approximately 3 metres below the surface) and the salinity probe and recorder are situated in the dry lab. The accuracy of this instrument is believed to be  $\pm 0.1^{\circ}$ C for temperature and  $\pm 0.1^{\circ}$ /oo for salinity.

STD profiles were taken with a Guildline Model 8700 STD system.

#### COMPUTATIONS.

All hydrographic data were processed with the aid of a UNIVAC 1100 computer. Reversing thermometer temperature corrections, thermometric depth calculations and accepted depth from the "depth difference" method were computed. Extraneous thermometric depths caused by thermometer malfunctions were automatically edited and replaced. A Calcomp 565 Offline Plotter was used to plot temperature-salinity and temperature-oxygen diagrams, as well as plots of temperature, salinity and dissolved oxygen vs  $\log_{10}$  depth. These plots were used to check the data for errors.

Missing hydrographic data were obtained using a weighted parabolas interpolation method (Reiniger and Ross, 1968). These data are indicated with an asterisk in this record.

Data values which we suspect but which we have included in this data record are indicated with a plus. These data have been removed from punch card and magnetic tape records.

Analog traces from the salinity-temperature-pressure instrument have been digitized using a Hewlett-Packard (HP) 9821A calculator and an HP 9864A digitizer, then replotted by an HP 9862A plotter. Digitization was continued until original and computer plotted traces were coincident.

The HP 9821A was then connected to an HP 2116 minicomputer and the digitized data transferred to 9-track tape. Using a UNIVAC 1106 computer the data was listed and obvious spikes removed, then a correction was applied.

Temperature and salinity values were listed at standard pressures and plotted using a Houston Complot DP8S plotter.

The headings for the data listings are explained as follows:

PRESS is pressure (decibars)

TEMP is temperature (degrees Celsius) SAL is salinity (parts per thousand)

DEPTH is reported in metres

SIGMA-T is specific gravity anomaly SVA is specific volume anomaly

THETA is potential temperature (degrees Celsius) SVA (THETA) is potential specific volume anomaly

DELTA D is geopotential anomaly (J/Kg)

POT EN is potential energy in units of 10 ergs/cm<sup>2</sup>

OXY is the concentration of dissolved oxygen expressed in

millilitres per litre

SOUND is the velocity of sound in m/sec

Data were processed for publication by C. de Jong, B. Minkley and J. Linguanti.

#### REFERENCES

- Carpenter, J.H., 1965. The Chesapeake Bay Institute technique for the Winkler dissolved oxygen method. Limnol. and Oceanogr. 10, 141-143.
- Collins, C.A., R.L. Tripe, D.A. Healey and J. Joergensen, 1969. The time distribution of serial oceanographic data from the Ocean Station P programme. Fish. Res. Bd. Can. Tech. Rept. No. 106.
- MacNeill, M., 1977. A study of anomalous salinity and oxygen values in the deep water at Ocean Station P from 1960-1976 (unpublished manuscript). Pacific Marine Science Report 77-9.
- Reiniger, R.F. and C.K. Ross, 1968. A method of interpolation with application to oceanographic data. Deep Sea Res. 15, 185-193.
- U.S.N. Hydrographic Office, 1955. Instruction Manual for oceanographic observations. Publ. No. 607.

LOG OF HYDROGRAPHIC AND STD OBSERVATIONS

Consec #	Stations	Date (Z)	Time (Z)	STD (m)	Hydrocast	(m) Comments
001	3	20/10/79	0320	1200		Ì
002	4	20/10/79	0635	1400		
* 003	5	20/10/79	1025	1400		down trace
004	5	20/10/79	1045	1300		up trace
005	6	20/10/79	1655	1400		
006	6	20/10/79	1810		1200	T,S > Line P
007	7	21/10/79	0100	1400		
800	8	21/10/79	0655	1400		
009	P	23/10/79	1715	300		
010	P	24/10/79	1715	1400		
011	P	24/10/79	2350	300		
012	P	25/10/79	1705	1400		
013	P	25/10/79	1803		4200	T,S,O <sub>2</sub>
014	P	25/10/79	2345	300		
015	P	28/10/79	1705	1400		
016	E3	28/10/79	1835	300		
017	E4	28/10/79	1950	300		
018	C1	28/10/79	2130	300		> MILE
019	W4	28/10/79	2305	300		grid
020	W3	29/10/79	0020	300		
021	P	29/10/79	0130	300		
022	P	29/10/79	2345	300		
023	P	30/10/79	1705	1400		
* 024	P	30/10/79	1820		500	Tritium
* 025	P	30/10/79	1850		75	pigments
026	P	30/10/79	2340	300		
027	P	31/10/79	1705	1400		
028	P	31/10/79	1758	1545		T, POC, Ch1 $\alpha$
029	P	31/10/79	2350	300		
030	P	01/11/79	1705	1400		
031	P	01/11/79	2350	300		
032	P	02/11/79	1715	300		
033	P	02/11/79	2345	300		
034	P	03/11/79	1715	300		
035	P	03/11/79	2335	300		
036	P P	04/11/79	1715	300		
037 038	P	04/11/79	2340	300		
039	P	05/11/79	1715	1400	1500	m c o
040	P	05/11/79 06/11/79	1817 0040	300	1500	T,S,O <sub>2</sub>
041	P	06/11/79	1705	1400		dorm twoo
* 042	P	06/11/79	1703	1400		down trace
043	P	06/11/79	1803	1400	1500	up trace
044	P	06/11/79	2355	300	1500	T, POC, Ch1 a
045	P	07/11/79	1710	1400		
046	P	07/11/79	2350	300	,	
047	P	08/11/79	1715	1400		`
048	E3	08/11/79	1900	300		
049	E4	08/11/79	2015	300		MILE
050	C1	08/11/79	2115	300		grid
050	0.1	00/11/19		500		) BIII

# LOG OF HYDROGRAPHIC AND STD OBSERVATIONS (continued)

200 01 1112	110011111110			(00110		
Consec #	Stations	Date (Z)	Time (Z)	STD (m)	Hydrocast	(m) Comments
051	W4	08/11/79	2310	300		MILE
* 052	W3	09/11/79	0050	300		grid
053	W3	09/11/79	0055	260		
054	P	09/11/79	0205	300		
055	P	09/11/79	1710	1400		
056	P	09/11/79	2340	300		
057	P	10/11/79	1715	1400		
058	P	10/11/79	1806		4200	T,S,O2
059	P	10/11/79	2340	300		
060	P	11/11/79	1705	1400		
061	P	11/11/79	2340	300		
062	P	12/11/79	1705	1400		
063	P	12/11/79	2335	300		
064	P	13/11/79	1705	1400		
065	P	13/11/79	1810		1500	T, POC, Ch1 $\alpha$
066	P	13/11/79	2345	300		
067	P	14/11/79	1710	1400		
068	P	14/11/79	2340	300		
069	P	15/11/79	1705	1400		
070	P	15/11/79	2340	300		
071	P	20/11/79	1720	300		
072	P	21/11/79	1755	300		
073	P	21/11/79	2335	300		
074	P	22/11/79	1720 1835	300 300		· · · · · · · · · · · · · · · · · · ·
075	E3	22/11/79	2005	300		MILE
076 077	E4 C1	22/11/79 22/11/79	2135	300		MILE grid
077	W4	22/11/79	2325	300		grid
078	W3	23/11/79	0040	300		
080	P	23/11/79	0150	300		
081	P	23/11/79	1715	1400		
082	P	23/11/79	1837	1400	1500	T,S,O2
* 083	P	23/11/79	2328		75	pigments
084	P	23/11/79	2335	300		1 0
085	P	24/11/79	1715	1400		
086	P	24/11/79	2333		1500	T, POC, Chl a
087	P	24/11/79	2340	300		
088	P	25/11/79	1720	1400		
089	P	25/11/79	2335	300		
090	P	26/11/79	1725	1400		
091	P	26/11/79	2340	300		
092	P	28/11/79	1720	300		
093	P	28/11/79	2335	300		
094	P	28/11/79	1715	1400		
095	P	29/11/79	1812		1500	T,S,O <sub>2</sub>
096	P	29/11/79	2335	300		
097	P	30/11/79	1725	300		
098	P	30/11/79	2340	300		
099	P	01/12/79	1720	1400		
100	P	01/12/79	2335	300		

# LOG OF HYDROGRAPHIC OBSERVATIONS (continued)

Consec	# Stations	Date (Z)	Time (Z)	STD (m)	Hydrocast	(m) Comments
101	12	02/12/79	1725	300		
102	11	03/12/79	0625	1400		
103	10	03/12/79	1210	1400		
104	9	03/12/79	1805	1400		
105	8	03/12/79	2350	1400		
106	7	04/12/79	0530	1400		
107	6	04/12/79	1125	1050		↑ Line P
108	5	04/12/79	1730	1400		
109	4	04/12/79	2120	1400		
110	3	05/12/79	0050	1200		
111	2	05/12/79	0325	90		
112	1	05/12/79	0505	100		

<sup>\*</sup> No data

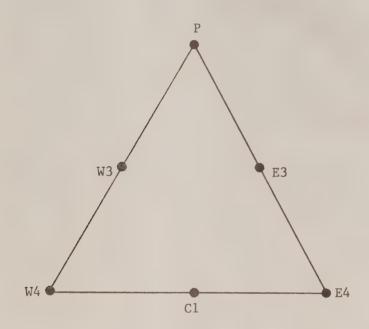
#### MILE GRID

#### (MIXED LAYER EXPERIMENT)

During the MILE experiment in the summer of 1977 a 20-mile triangular grid was initiated with STD stations to 300 metres.

During this cruise the grid survey was completed three times.

1st - STD consec. #015 - #021 2nd - STD consec. #047 - #054 3rd - STD consec. #074 - #080



Station ID and positions are as follows:

 $P = 50^{\circ}00'N, 145^{\circ}00'W$   $E3 = 49^{\circ}52'N, 144^{\circ}52'W$   $E4 = 49^{\circ}43'N, 144^{\circ}44'W$   $C1 = 49^{\circ}42'N, 145^{\circ}00'W$   $W4 = 49^{\circ}43'N, 145^{\circ}15'W$  $W3 = 49^{\circ}52'N, 145^{\circ}07'W$ 

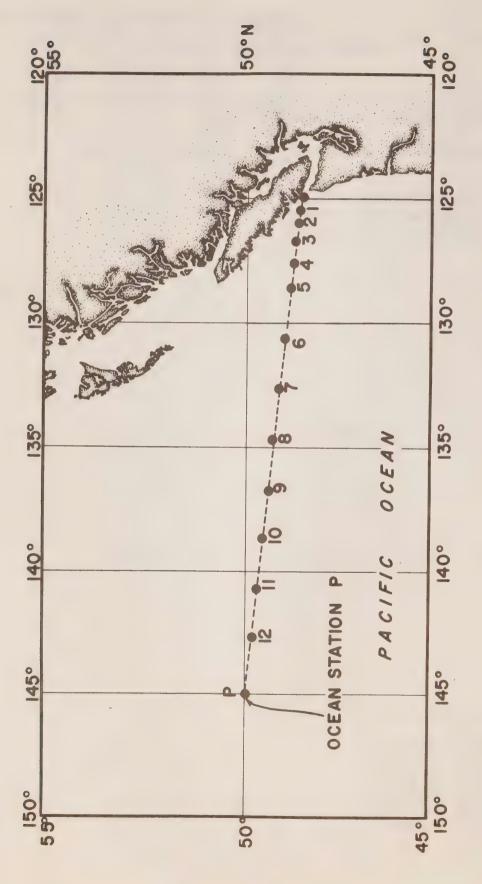


Fig. 1 Chart showing Line P station positions.

Oceanographic Data Obtained on Cruise P-79-8

(MEDS Reference No. 15-79-008)



Results of Hydrographic Observations

(P-79-8)

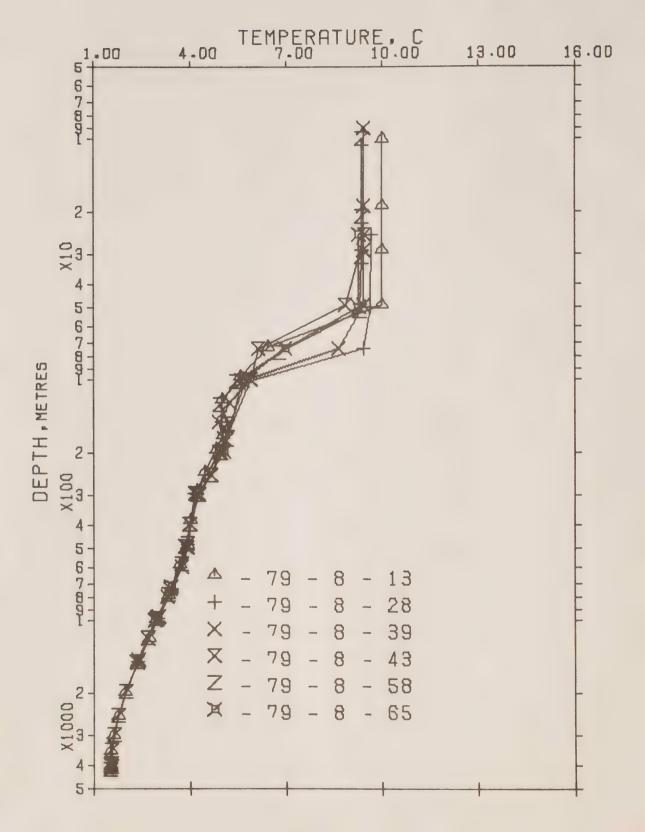


Figure 2(a). Composite plot of temperature vs  $\log_{10}$  depth for Station P.

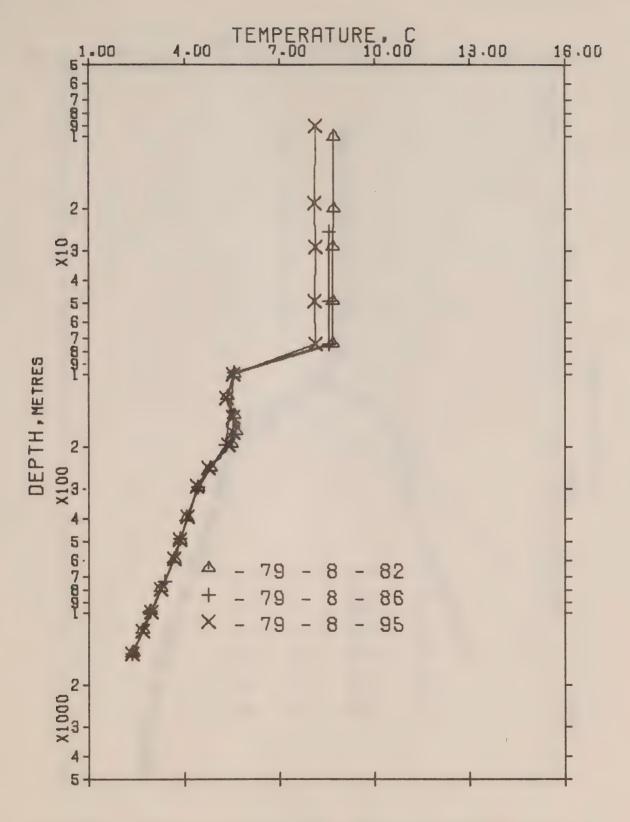


Figure 2(b). Composite plot of temperature vs  $\log_{10}$  depth for Station P.

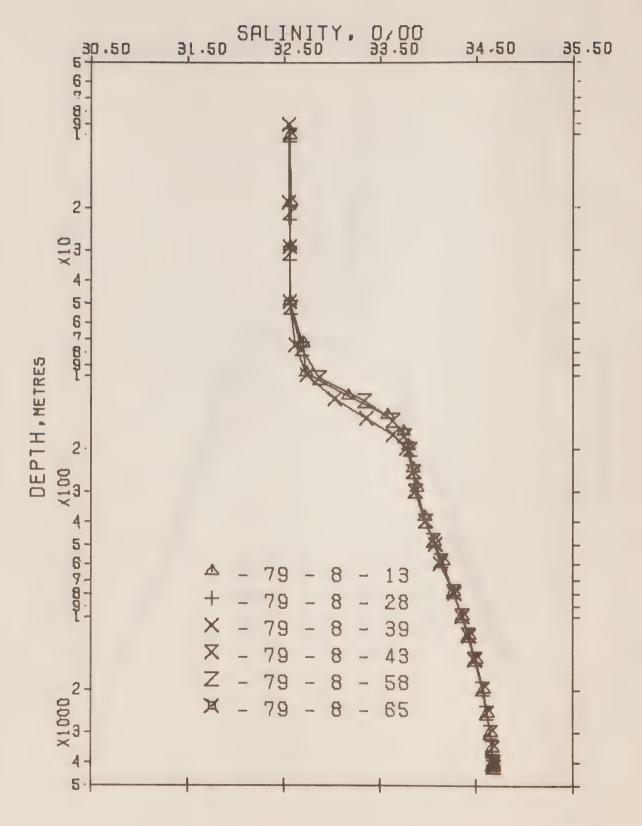


Figure 3(a). Composite plot of salinity vs  $\log_{10}$  depth for Station P.

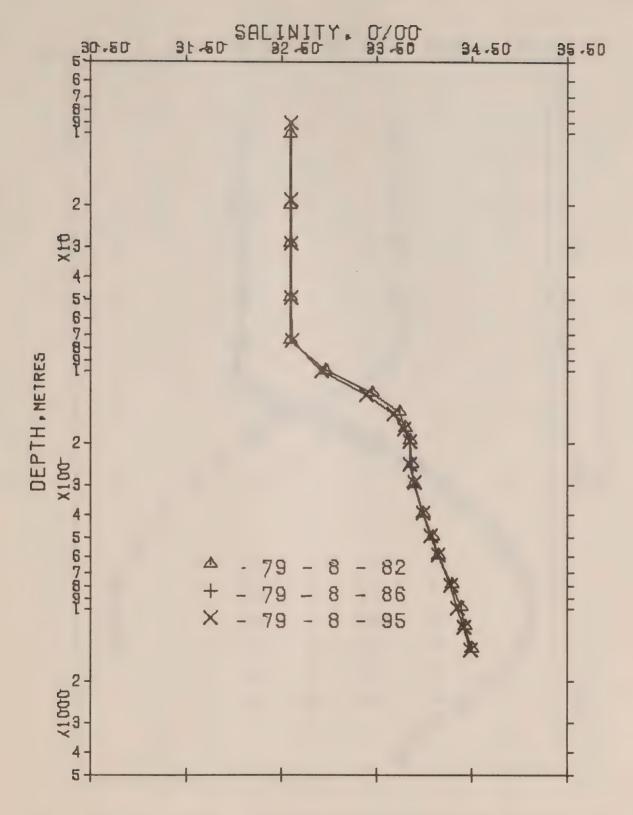


Figure 3(b). Composite plot of salinity vs  $\log_{10}$  depth for Station P.

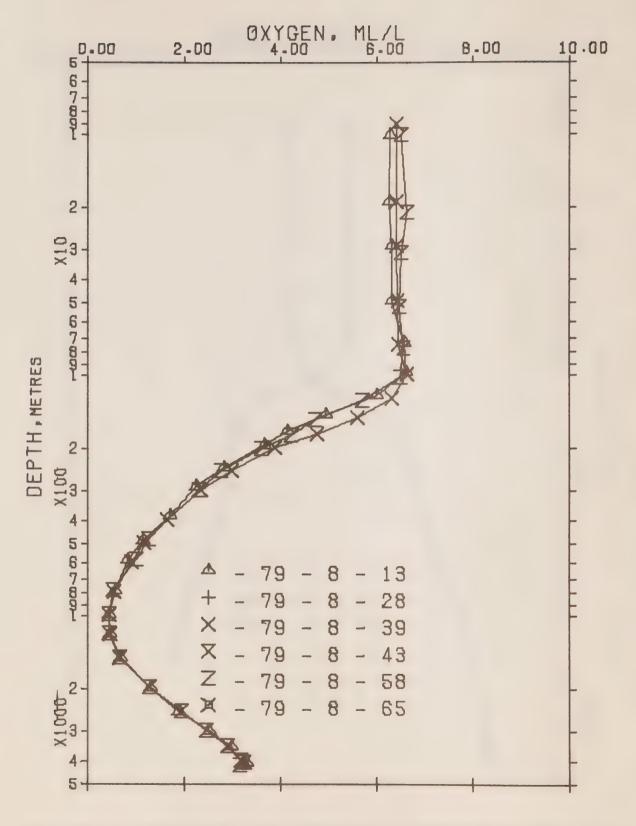


Figure 4(a). Composite plot of oxygen vs  $\log_{10}$  depth for Station P.

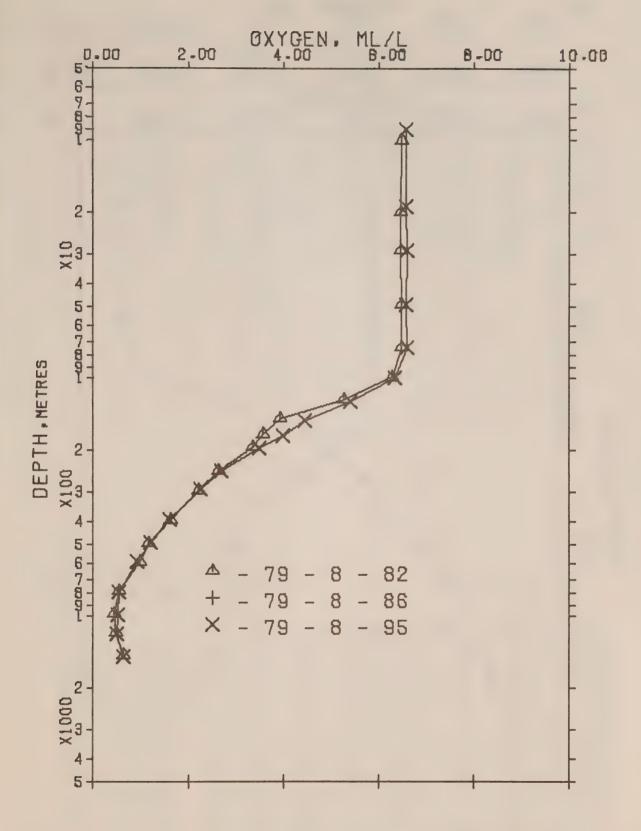
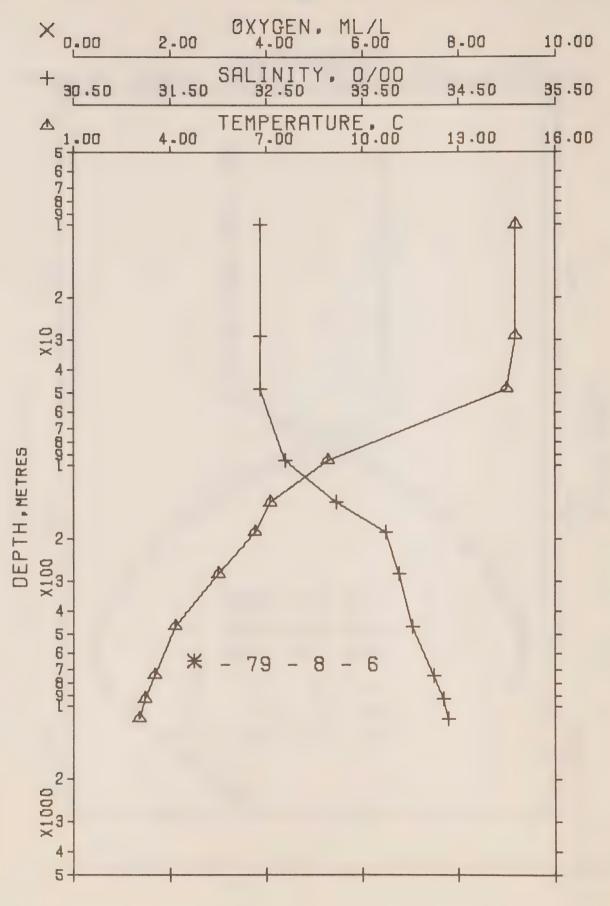


Figure 4(b). Composite plot of oxygen vs log depth for Station P.



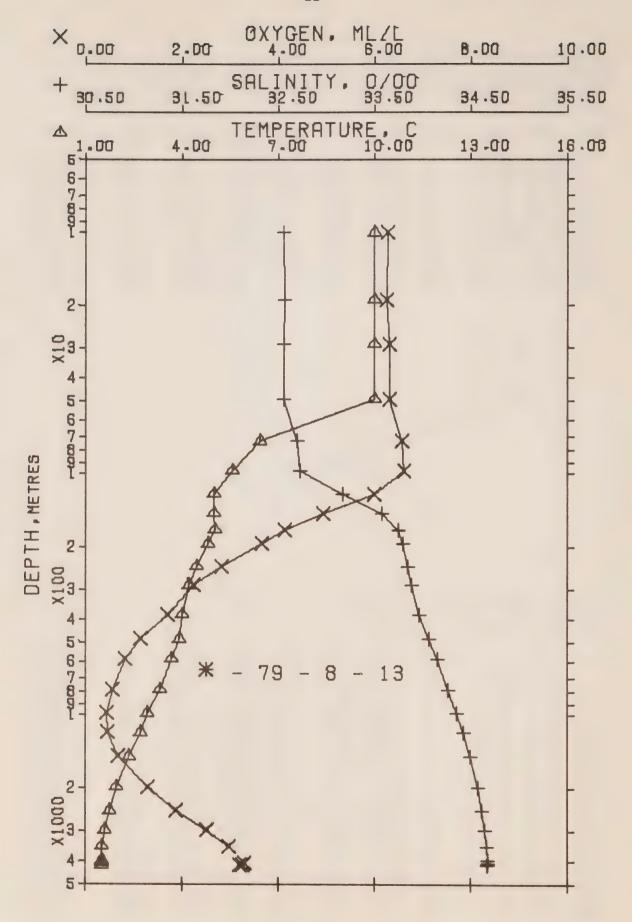
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 6 DATE 20/10/79 GMT 18.2
POSITION 49- 2.0 N, 130-40.0 W
HYDROGRAPHIC CAST DATA

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	THETA	SVA	DELTA	POT.	OXY	SOUND
				1			(THETA)	D	EN		
0	14.76	32.445	0	24.079	384.4	14.76	384.4	•00	.00		1503.
10	14.77	32.443	10	24.075	385.0	14.77	384.7	• 39	.02		1504.
29	14.77	32.441	29	24.074	385.7	14.77	384.8	1.12	.17		1504.
48	14.49	32.442	48	24.134	380.4	14.48	379.0	1.87	.46		1503.
95	8.92	32.701	95	25.356	264.5	8.91	262.7	3.36	1.53		1485.
143	7.13	33.234	142	20.034	200.4	7.12	198.1	4.45	2.85		1480
189	6.65	33.751	188	26.505	156.3	6.63	153.4	5.27	4.23		1479.
283	5.51	33.895	281	26.763	132.5	5.49	128.9	6.61	7.45		1476.
468	4.16	34.032	464	27.023	108.6	4.13	104.2	8.82	15.83		1474.
746	3.53	34.254	740	27.263	87.5	3.48	81.3	11.53	32.47		1476.
937	3.22	34.348	928	27.367	78.4	3.15	71.3	13.10	45.94		1478.
1133	3.03	34.399	1122	27.425	73.8	2.95	65.7	14.60	61.69		1481.

OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 6 DATE 20/10/79 GMT 18.2
POSITION 49- 2.0 N, 130-40.0 W
INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	THETA	SVA	DELTA	POT.	OXY	SOUND
0	14.76	32.445	0	24.079	384.4	14.76	(THETA) 384.4	.00	•00		1503.
10	14.77	32.443	10	24.075	385.0	14.77	384.7	•39	.02		1504.
20	14.77	32.442	20	24.074	385.4	14.77	384.8	.77	.08		1504.
30	14.75	32.441	30	24.077	385.3	14.75	384.5	1.16	•18		1504.
50	14.20	32.456	50	24.206	373.6	14.19	372.2	1.93	•50		1502.
75	10.90	32.609	75	24.957	302.3	10.89	300.6	2.78	1.03		1492.
100	8.71	32.762	99	25.435	257.0	8.70	255.1	3.48	1.65		1484.
125	7.72	33.057	124	25.813	221.3	7.71	219.2	4.07	2.33		1481.
150	7.05	33.324	149	26.117	192.6	7.03	190.3	4.59	3.06		1479.
175	6.78	33.608	174	26.375	168.4	6.77	165.8	5.04	3.80		1479.
200	6.49	33.771	199	26.542	152.9	6.47	149.9	5.44	4.56		1479.
225	6.16	33.813	224	26.618	145.8	6.14	142.7	5.81	5.37		1478.
250	5.86	33.851	248	26.685	139.6	5.84	136.3	6.17	6.23		1477.
300	5.35	33.911	298	26.794	129.6	5.33	125.9	6.84	8.11		1476.
400	4.58	33.989	397	26.944	115.9	4.55	111.6	8.06	12.48		1474.
500	4.07	34.064	496	27.058	105.6	4.03	100.9	9.17	17.54		1474.
600	3.82	34.150	595	27.151	97.3	3.78	91.9	10.18	23.21		1475.
700	3.62	34.224	694	27.230	90.3	3.57	84.4	11.12	29.43		1476.
800	3.44	34.283	793	27.295	84.7	3.38	78.2	11.99	36.10		1477.
900	3.27	34.331	892	27.349	80.0	3.21	73.0	12.81	43.23		1478.
1000	3.15	34.366	991	27.387	76.8	3.08	69.4	13.60	50.80		1479.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 13 DATE 25/10/79 GMT 18.0
POSITION 50- .0 N, 145- .0 W
HYDROGRAPHIC CAST DATA

STATION P

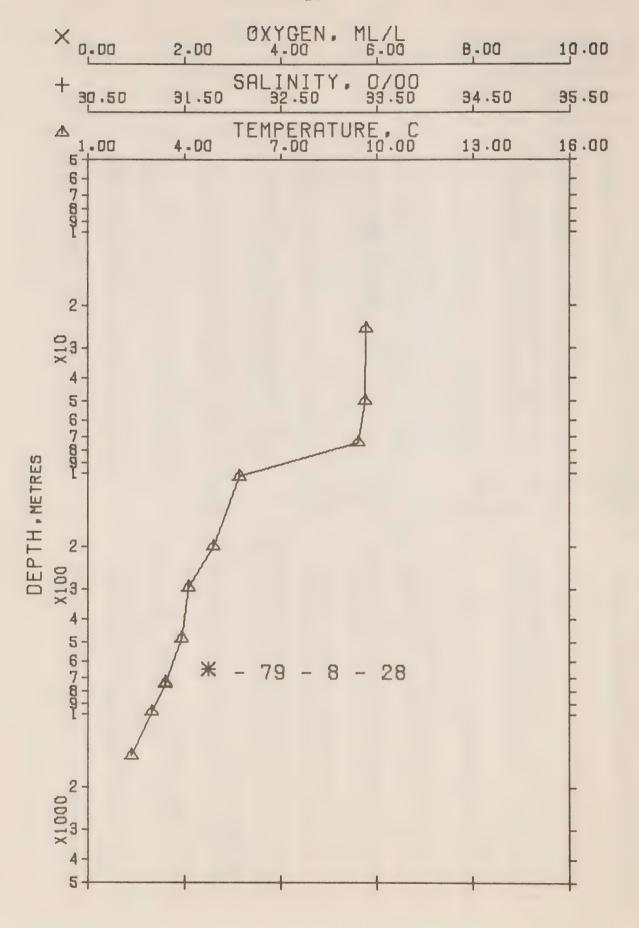
OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	THETA	SVA	DELTA	POT.	OXY	SOUND
				T			(THETA)	D	EN		
0	10.00	32.565	0	25.076	289.4	10.00	289.4	.00	.00	6.33	1487.
10	10.00	32.559	10	25.071	290.1	10.00	289.9	•29	.01	6.29	1487.
19	10.00	32.565	19	25.076	289.8	10.00	289.4	•55	• 05	6.26	1488.
29	10.00	32.559	29	25.071	290.4	10.00	289.8	•85	•13	6.31	1488.
49	10.00	32.561	49	25.073	290.7	9.99	289.6	1.45	• 37	6.32	1488.
73	6.44	32.700	73	25.706	230.4	6.43	229.4	2.07	•76	6.59	1475.
98	5.55	32.729	97	25.838	217.9	5.54	216.9	2.61	1.23	6.63	1472.
122	4.99	33.174	121	26.254	178.6	4.98	177.4	3.09	1.76	6.01	1471.
146	5.00	33.577	145	26.571	148.8	4.99	147.2	3.49	2.30	4.95	1471.
171	5.03	33.753	170	20.707	136.3	5.02	134.3	3.85	2.88	4.15	1472.
195	4.80	33.798	194	26.768	130.6	4.79	128.5	4.17	3.48	3.66	1472.
243	4.44	33.848	241	25.847	123.4	4.42	121.0	4.77	4.82	2.81	1471.
291	4.20	33.893	289	26.909	117.9	4.18	115.1	5.35	6.41	2.25	.1471.
385	4.01	33.970	382	20.989	110.9	3.98	107.4	6.43	10.11	1.69	1472.
487	3.92	34.074	483	27.081	103.1	3.88	98.7	7.52	14.95	1.14	1473.
588	3.67	34.157	583	27.172	95.0	3.63	90.0	8.51	20.41	.81	1474.
789	3.30	34.273	782	27.300	83.9	3.24	77.8	10.31	32.97	.56	1476.
992	2.93	34.362	98,2	27.405	74.6	2.86	67.7	11.91	47.47	.44	1478.
1194	2.70	34.425	1182	27.475	68.6	2.62	60.9	13.36	63.60	.46	1480.
1499	2.34	34.500	1483	27.566	60.6	2.24	52.2	15.32	90.48	.68	1484.
2009	1.96	34.577	1985	27.658	52.7	1.82	43.3	18.21	142.14	1.31	1491.
2521	1.74	34.618	2487	27.708	48.8	1.56	38.3	20.79	201.58	1.88	1498.
3030	1.60	34.651	2986	27.745	46.1	1.38	34.6	23.19	269.71	2.51	1506.
3539	1.52	34.669	3483	27.765	45.0	1.25	32.4	25.50	346.97	2.97	1515.
4044	1.51	34.678	3976	27.773	45.5	1.18	31.3	27.78	435.12	3,25	1523.
4145	1.52	34.677	4074	27.771	46.0	1.18	31.3	28.24	454.32	3.30	1525.
4234	1.52	34.674	4161	27.769	46.4	1.17	31.5	28.66	471.98	3.21	1527.
4244	1.52	34.681	4171	27.775	46.0	1.17	31.0	28.70	474.03	3.25	1527.

OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 13 DATE 25/10/79 GMT 18.0
POSITION 50- .0 N, 145- .0 W
INTERPOLATED TO STANDARD PRESSURE

STATION P

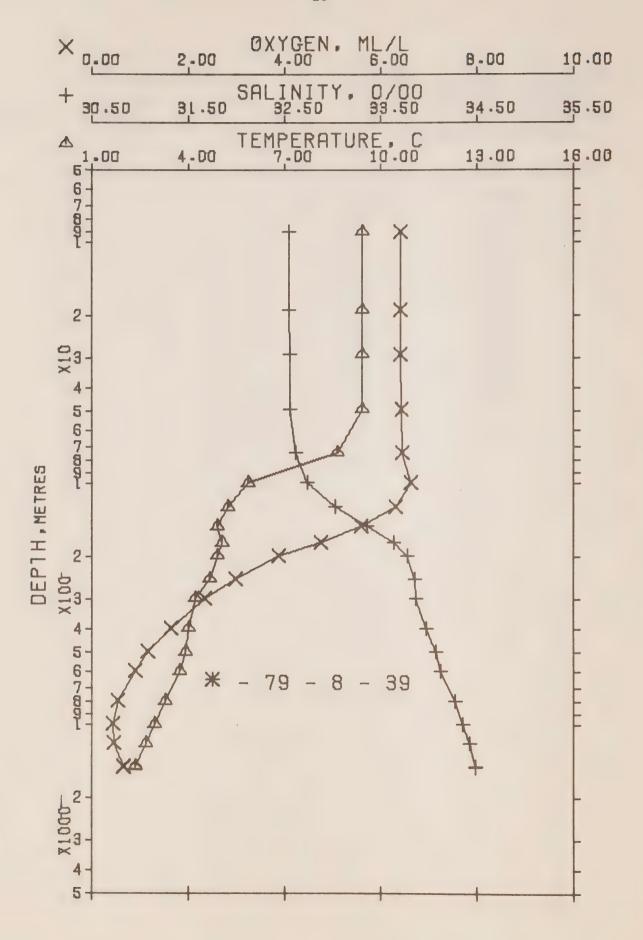
PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	THETA	SVA	DELTA	POT.	ОХА	SOUND
				T			(THETA)	D	EN		
0	10.00	32.565	0	25.076	289.4	10.00	289.4	.00	.00	6.33	1487.
10	10.00	32.559	10	25.071	290.1	10.00	289.9	•29	.01	6.29	1487.
20	10.00	32.564	20	25.075	289.9	10.00	289.4	•58	• 06	6.26	1488.
30	10.00	32.559	30	25.071	290.4	10.00	289.8	.87	•13	6.31	1488.
50	9.87	32.566	50	25.098	288.3	9.87	287.2	1.47	•38	6.33	1488.
75	6.37	32.702	<b>7</b> 5	25.716	229.4	6.37	228.5	2.11	•78	6,59	1475.
100	5.49	32.778	99	25.884	213.6	5.48	212.5	2.67	1.28	6.56	1472.
125	4.99	33.232	124	26.300	174.3	4.98	173.0	3.15	1.83	5.85	1471.
150	5.01	33.607	149	26.595	146.7	4.99	145.0	3.55	2.39	4.81	1472.
175	4.99	33.761	174	26.717	135.3	4.98	133.3	3.90	2.97	4.07	1472.
200	4.76	33.803	199	26.777	129.8	4.75	127.6	4.23	3.60	3.57	1472.
225	4.57	33.831	223	26.820	125.9	4.55	123.6	4.55	4.29	3.11	1471.
250	4.40	33.855	248	26.857	122.5	4.38	120.0	4.86	5.04	2.72	1471.
300	4.18	33.901	298	26.917	117.2	4.16	114.3	5.46	6.72	2.19	1471.
400	4.00	33.987	397	27.004	109.7	3.97	106.0	6.59	10.77	1.60	1472.
500	3.88	34.086	496	27.094	101.9	3.85	97.4	7.65	15.62	1.10	1473.
600	3.64	34.165	595	27.181	94.2	3.60	89.1	8.63	21.10	.79	1474.
700	3.45	34.226	694	27.248	88.4	3.40	82.7	9.54	27.15	.66	1475.
800	3.28	34.278	793	27.306	83.3	3.22	77.2	10.40	33.71	•55	1476.
900	3.09	34.324	892	27.361	78.5	3.02	72.0	11.21	40.71	.49	1477.
1000	2.92	34.365	990	27.408	74.3	2.85	67.4	11.97	48.11	.44	1478.
1200	2.69	34.427	1188	27.477	68.4	2.61	60.8	13.40	64.09	.47	1480.
1500	2.34	34.500	1484	27.566	60.6	2.24	52.2	15.32	90.54	.68	1484.
2000	1.97	34.576	1976	27.657	52.8	1.83	43.4	18.16	141.12	1.30	1491.
2500	1.75	34.617	2467	27.706	48.9	1.57	38.5	20.68	198.99	1.86	1498.
3000	1.61	34.649	2957	27.743	46.2	1.39	34.8	23.06	265.45	2.48	1506.
3500	1.53	34.668	3445	27.763	45.1	1.26	32.5	25.33	340.75	2.94	1514.
4000	1.51	34.677	3933	27.772	45.5	1.19	31.4	27.58	426.93	3.22	1523.
4100	1.52	34.677	4031	27.772	45.8	1.18	31.3	28.04	445.74	3.27	1524.
4200	1.52	34.675	4128	27.770	46.3	1.17	31.4	28.50	465.21	3.24	1526.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 28 DATE 31/10/79 GMT 17.9
POSITION 50- .0 N, 145- .0 W STATION P
HYDROGRAPHIC CAST DATA

# OBSERVED DATA

TEMP	DEPTH
9.66	: 0
9.66	25
9.64	50
9.42	74
5.70	103
4.90	200
4.11	296
3.92	484
3.41	737
3.39	747
2.97	975
2.34	1484



OFFSHORE OCEANOGRAPHY GROUP REFERENCE NO. 79- 8- 39 DATE 5/11/79 GMT 18.3
POSITION 50- .0 N. 145- .0 W
HYDROGRAPHIC CAST DATA

STATION P

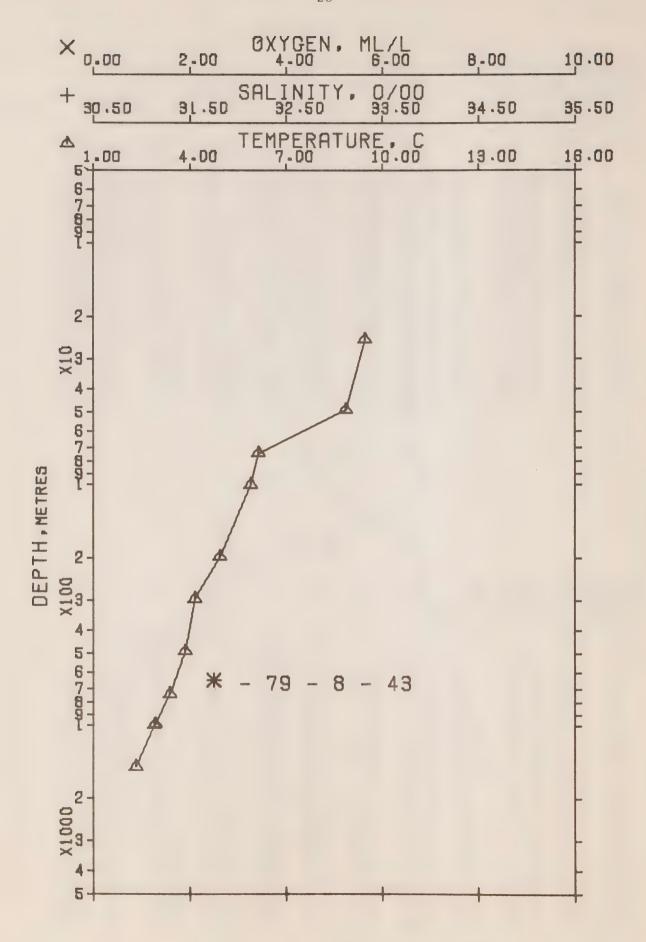
OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA	POT. EN	OXA	SOUND
0	9.43	32.555	0	25.161	281.3	9.43	281.3	.00	.00	6.42	1485.
9	9.43	32.555	9	25.161	281.5	9.43	281.3	• 25	.01	6.42	1485.
19	9.43	32.555	19	25.161	281.7	9.43	281.3	•54	.05	6.42	1485.
29	9.42	32.561	29	25.168	281.2	9.42	280.7	•82	.12	6.43	1486
49	9.42	32.557	49	25.164	281.9	9.41	280.9	1.39	•35	6.45	1486.
74	8.64	32.620	74	25.335	266.0	8.63	264.6	2.09	•79	6.46	1483.
100	5.87	32.741	99	25.809	220.8	5.86	219.6	2.70	1.33	6.64	1473.
126	5.24	33.035	125	26.116	191.8	5.23	190.5	3.24	1.95	6.32	1471.
151	4.91	33.363	150	26.412	163.9	4.90	162.3	3.69	2.58	5.60	1471.
176	5.05	33.643	175	26.618	144.8	5.04	142.8	4.07	3.22	4.76	1472.
200	4.90	33.782	199	26.745	132.9	4.88	130.7	4.41	3.86	3.88	1472.
250	4.67	33.855	248	26.828	125.4	4.65	122.8	5.04	5.32	2.97	1472.
300	4.20	33.873	298	26.893	119.5	4.18	116.6	5.66	7.05	2.35	1471.
400	4.01	33.981	397.	26.998	110.3	3.98	106.6	6.80	11.13	1.64	1472.
501	3.90	34.077	497	27.085	102.7	3.86	98.2	7.88	16.07	1.17	1473.
601	3.73	34.134	596	27.148	97.5	3.69	92.3	8.88	21.68	.91	1474.
801	3.27	34.280	794	27.308	83.1	3.21	77.0	10.68	34.51	.54	1476.
1002	2.94	34.362	99,2	27.404	74.8	2.87	67.8	12.25	48.98	.43	1478.
1202	2.67	34.428	1190	27.480	68.1	2.59	60.5	13.68	65.03	.46	1480.
1497	2.36	34.491	1481	27.557	61.5	2.26	53.1	15.58	91.20	.66	1484.
1507	2.35	34.493	1491	27.560	61.3	2.25	52.9	15.65	92.15	.66	1484.

OFFSHORE OCEANOGRAPHY GROUP REFERENCE NO. 79- 8- 39 DATE 5/11/79 GMT 18.3
POSITION 50- .0 N, 145- .0 W INTERPOLATED TO STANDARD PRESSURE

STATION P

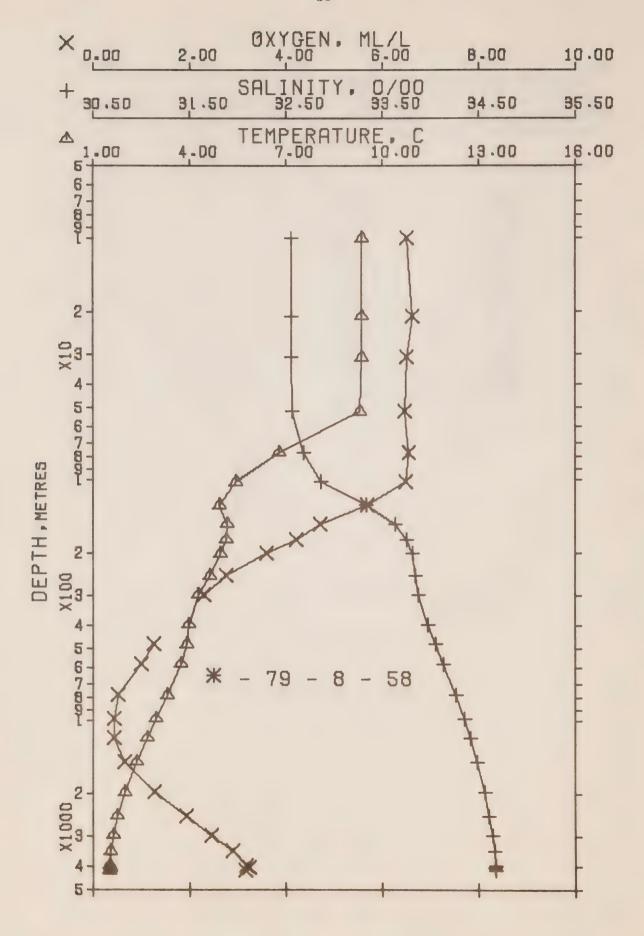
PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	THETA	SVA (THETA)	DELTA	POT. EN	ОХА	SOUND
0	9.43	32.555	0	25.161	281.3	9.43	281.3	.00	•00	6.42	1485.
10	9.43	32.555	10	25.161	281.5	9.43	281.3	.28	.01	6.42	1485.
20	9.43	32.556	20	25.162	281.6	9.43	281.2	•56	.06	6.42	1485.
30	9.42	32.561	30	25.167	281.3	9.42	280.7	•84	. +13	6.43	1486.
50	9.39	32.559	50	25.170	281.3	9.39	280.4	1.41	• 36	6.45	1486.
75	8.57	32.623	75	25.349	264.7	8.56	263.4	2.10	.80	6.47	1483.
100	5.87	32.741	99	25.809	220.8	5.86	219.6	2.70	1.33	6.64	1473.
125	5.26	33.027	124	26.108	192.6	5.25	191.3	3.22	1.93	6.32	1471.
150	4.92	33.351	149	26.402	164.9	4.91	163.3	3.67	2.55	5.62	1471.
175	5.04	33.631	174	26.609	145.6	5.03	143.6	4.06	3.19	4.80	1472.
200	4.90	33.782	199	26.745	132.9	4.88	130.7	4.41	3.86	3.88	1472.
225	4.78	33.820	223	26.789	129.0	4.76	126.5	4.73	4.56	3.40	1472.
250	4.67	33.855	248	26.828	125.4	4.65	122.8	5.04	5.32	2.97	1472.
300	4.20	33.873	298	26.893	119.5	4.18	116.6	5.66	7.05	2.35	1471.
400	4.01	33.981	397	26.998	110.3	3.98	106.6	6.80	11.13	1.64	1472.
500	3.90	34.076	496	27.085	102.8	3.86	98.3	7.87	16.01	1.17	1473.
600	3.73	34.133	595	27.147	97.5	3.69	92.3	8.87	21.61	.91	1474.
700	3.49	34.211	694	27.233	89.8	3.44	84.1	9.80	27.82	.71	1475.
800	3.27	34.279	793	27.307	83.2	3.22	77.0	10.67	34.43	•54	1476.
900	3.10	34.323	892	27.358	78.7	3.04	72.2	11.47	41.42	.48	1477.
1000	2.94	34.361	990	27.403	74.8	2.87	67.9	12.24	48 • 85	44	
1200	2.67	34.427	1188	27.480	68.1	2.59	60.5	13.67	64.85	.46	
1500	2.36	34.492	1484	27.558	61.4	2.26	53.0	15.60	91.45	,66	1484.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 43 DATE 6/11/79 GMT 18.1
POSITION 50- .0 N: 145- .0 W STATION P
HYDROGRAPHIC CAST DATA

# OBSERVED DATA

TEMP	DEPTH
9.51	0
9.46	25
8.85	49
6.14	74
5.88	100
4.92	199
4.14	297
3.85	489
3.37	738
2.92	987
2.90	997
2.33	1485



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 58
POSITION 50- .0 N, 145- .0 W
HYDROGRAPHIC CAST DATA

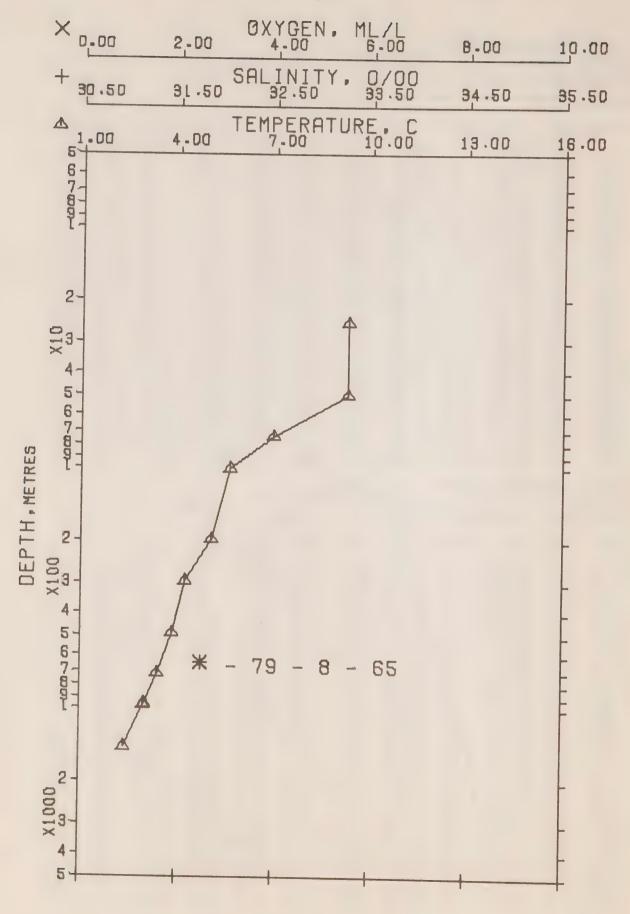
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 58
DATE 10/11/79
GMT 18.1
STATION P

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	THETA	SVA (THETA)	DELTA	POT. EN	OXY	SOUND
0	9.40	32.562	0	25.172	280.3	9.40	280.3	•00	•00	6.52	1485.
10	9.37	32.561	10	25.176	280.1	9.37	279.9	•28	.01	6.51	1485.
21	9.37	32.560	21	25.175	280.4	9.37	280.0	•59	•06	6.64	1485.
31	9.37	32.562	31	25.176	280.4	9.37	279.8	•87	•14	6.51	
52	9.32	32.566	52	25.187	279.8	9.31	278.7	1.47	• 39	6.47	1485. 1486.
77	6.80	32.694	77	25.655	235.4	6.79	234.3	2.11	.82	6.57	1476.
103	5.44	32.870	102	25.962	206.2	5.43	205.1	2.67	1.32	6.50	1472.
128	4.94	33.342	127	26.392	165.6	4.93	164.2	3.13	1.87	5.71	1471.
153	5.17	33.640	152	26.602	146.1	5.16	144.3	3.53	2.43	4.72	1472.
177	5.15	33.761	176	26.699	137.1	5.14	135.0	3.87	3.00	4.21	1473.
202	4.96	33.815	201	26.764	131.2	4.94	128.9	4.20	3.66	3.59	1473.
251	4.63	33.850	249	26.828	125.4	4.61	122.7	4.82	5.09	2.76	1472
300	4.26	33.883	298	26.894	119.4	4.24	116.5	5.43	6.79	2.30	1471.
400	3.97	33.978	397	27.000	110.1	3.94	106.4	6.57	10.86	1.67	1472.
483	3.92	34.060	479	27.070	104.1	3.89	99.7	7.46	14.85	1.26	1473.
584	3.72	34.137	579	27.151	97.0	3.68	92.0	8.47	20.37	1.00	1474.
785	3.30	34.268	778	27.296	84.2	3.25	78.1	10.29	33.00	.53	1476.
986	2.96	34.358	977	27.399	75.2	2.89	68.3	11.89	47.42	.44	1478.
1189	2.69	34.418	1177	27.471	69.0	2.61	61.4	13.35	63.57	.43	1480.
1494	2.36	34.491	1478	27.557	61.5	2.26	53.1	15.33	90.65	.66	1484
2003	1.99	34.570	1979	27.650	53.5	1.85	44.1	18.26	142.82	1.27	1491.
2514	1.75	34.610	2480	27.701	49.4	1.57	39.0	20.87	202.86	1.93	1498.
3023	1.62	34.648	2979	27.741	46.5	1.40	35.0	23.30	271.63	2.46	1506.
3529	1.54	34.671	3474	27.765	45.1	1.27	32.3	25.62	348.90	2.90	1515.
4032	1.52	34.678	3964	27.772	45.6	1.19	31.3	27.89	436.45	3.18	1523.
4132	1.53	34.672	4062	27.767	46.5	1.19	31.8	28.35	455.72	3.24	1525.
4222	1.52	34.678	4149	27.772	46.1	1.17	31.2	28.77	473.34	3.17	1527
4232	1.52	34.675	4159	27.770	46.3	1.17	31.4	28.81	475.39	3,16	1527.

OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 58 DATE 10/11/79 GMT 18.1
POSITION 50- .0 N, 145- .0 W
INTERPOLATED TO STANDARD PRESSURE

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	THETA	SVA	DELTA	POT.	$O_{XY}$	SOUND
	0 40	70 E/O	0	07: 170	000 7	0 110	(THETA)	D	EN	6 50	1/105
0	9.40	32.562	0	25.172	280.3	9.40	280.3	•00 •28	.00	6.52	1485.
10	9.37	32.561	10	25.176	280.1	9.37	279.9		•01	6.51	1485.
20	9.37	32.560	20	25.175	280.4	9.37	280.0	•56	•06		1485.
30	9.37	32.562	30	25.176	280.4	9.37	279.8	.84	•13	6.52	1485.
50	9.32	32.566	50	25.186	279.8	9.32	278.8	1.40	•36	6.48	1486.
75	7.01	32.683	75	25.619	238.8	7.00	237.7	2.05	•77	6.56	1477.
100	5.57	32.854	99	25.935	208.8	5.56	207.7	2.61	1.27	6.51	1472.
125	4.99	33.294	124	26.349	169.7	4.98	168.4	3.09	1.81	5.79	1471.
150	5.14	33.607	149	26.579	148.2	5.13	146.5	3.48	2.36	4.83	1472.
175	5.15	33.751	174	26.691	137.9	5.14	135.8	3.84	2.95	4.26	1473.
200	4.98	33.810	199	26.758	131.7	4.96	129.4	4.17	3.59	3.65	1473.
225	4.80	33.832	223	26.796	128.3	4.78	125.8	4.50	4.29	3.18	1472.
250	4.63	33.849	248	26.827	125.5	4.62	122.8	4.81	5.06	2.77	1472.
300	4.26	33.883	298	26.894	119.4	4.24	116.5	5.43	6.79	2.30	1471.
400	3.97	33.978	397	27.000	110.1	3.94	106.4	6.57	10.86	1.67	1472.
500	3.88	34.074	496	27.085	102.8	3.85	98.3	7.63	15.74	1.21	1473.
600	3.68	34.149	595	27.164	95.8	3.64	90.7	8.63	21.30	.95	1474.
700	3.46	34.217	694	27.240	89.1	3.41	83.5	9.55	27.42	.71	1475.
800	3.27	34.275	793	27.304	83.5	3.22	77.3	10.41	34.01	•52	1476.
900	3.10	34.322	892	27.358	78.8	3.03	72.2	11.22	41.03	.48	1477.
1000	2.94	34.362	990	27.404	74.7	2.87	67.8	11.99	48.45	.44	1478.
1200	2.68	34.421	1188	27.474	68.7	2.60	61.1	13.42	64.49	.44	1480.
1500	2.36	34.492	1484	27.558	61.4	2.25	53.0	15.36	91.18	.66	1484.
2000	1.99	34.570	1976	27.650	53.6	1.85	44.1	18.24	142.45	1.27	1491.
2500	1.76	34.609	2467	27.699	49.5	1.58	39.1	20.80	201.14	1.92	1498.
3000	1.63	34.646	2957	27.739	46.6	1.40	35.1	23.20	268.35	2.44	1506.
3500	1.54	34.670	3445	27.764	45.2	1.27	32.5	25.48	344.16	2.88	1514.
4000	1.52	34.678	3933	27.772	45.6	1.20	31.4	27.74	430.55	3.16	1523.
4100	1.53	34.674	4031	27.768	46.2	1.19	31.6	28.20	449.46	3.22	1524.
4200	1.52	34.677	4128	27.771	46.2	1.18	31.3	28.67	469.08	3.19	1526.

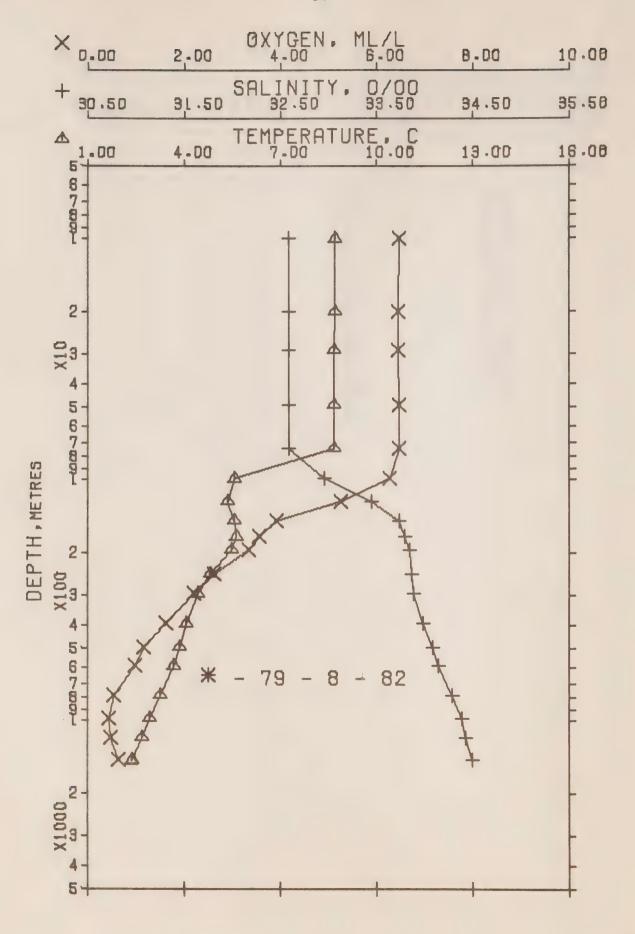


OFFSHORE OCEANOGRAPHY GROUP REFERENCE NO. 79- 8- 65 DATE 13/11/79 GMT 18.2
POSITION 50- .0 N. 145- .0 W HYDROGRAPHIC CAST DATA

STATION P

# OBSERVED DATA

TEMP	DEPTH
9.28	0
9.28	25
9.28	50
6.97	74
5.63	101
5.05	199
4.25	297
3.86	489
3.41	722
3.00	962
2.98	972
2.37	1460



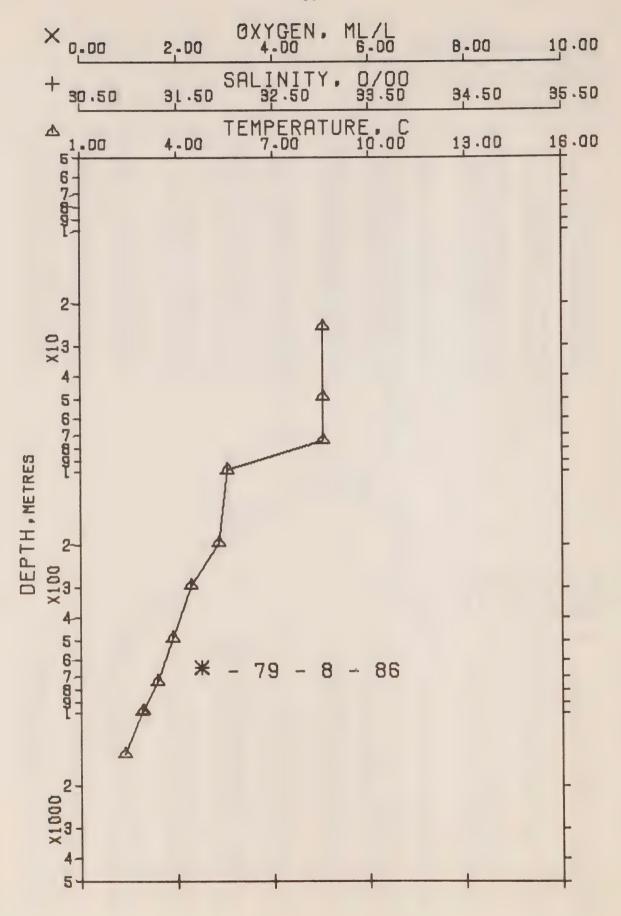
STATION P

### OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	THETA	SVA	DELTA	POT.	OXY	SOUND
				T			(THETA)	D	EN		
0	8.70	32.587	0	25.300	268.1	8.70	268.1	• 00	.00	6.45	1482.
10	8.70	32.585	10	25.299	268.4	8.70	268.2	.27	.01	6.47	1483.
20	8.70	32.586	20	25.300	268.5	8.70	268.1	•54	•06	6.47	1483.
29	8.69	32.586	29	25.301	268.5	8.69	268.0	.78	•12	6.46	1483.
49	8.68	32.585	49	25.302	268.7	8.67	267.9	1.32	• 33	6.47	1483.
74	8.68	32.587	74	25.304	269.0	8.67	267.7	2.02	•78	6.48	1484.
100	5.56	32.963	99	26.022	200.6	5.55	199.4	2.61	1.30	6.28	1472.
124	5.35	33.454	123	26.434	161.7	5.34	160.3	3.05	1.79	5.26	1472.
149	5.57	33.739	148	26.633	143.3	5.56	141.4	3.43	2.33	3.93	1474.
173	5.62	33.805	172	26.679	139.2	5.61	137.0	3.78	2.89	3.57	1475.
196	5.47	33.846	195	20.729	134.7	5.45	132.2	4.09	3.49	3.34	1475.
248	4.82	33.867	246	26.821	126.2	4.80	123.5	4.76	5.00	2.63	1473.
298	4.43	33.888	296	26.880	120.8	4.41	117.8	5.39	6.73	2.19	1472.
398	4.05	33.986	395	26.998	110.3	4.02	106.6	6.54	10.82	1.62	1472.
498	3.85	34.086	494	27.098	101.5	3.81	97.1	7.59	15.64	1.16	1473.
596	3.66	34.151	591	27.168	95.4	3.62	90.3	8.56	21.03	.98	1474.
792	3.25	34.288	785	27.317	82.2	3.20	76.2	10.30	33.27	.54	1476.
988	2.92	34.386	979	27.425	72.7	2.85	65.8	11.81	47.01	.44	1478.
1186	2.68	34.432	1174	27.483	67.8	2.60	60.3	13.20	62.38	.48	1480.
1477	2.37	34.498	1461	27.562	61.0	2.27	52.6	15.07	87.71	.64	1484.

OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 82 DATE 23/11/79 GMT 18.6
POSITION 50- .0 N, 145- .0 W
INTERPOLATED TO STANDARD PRESSURE STATION P

DDECE	TEMP	CAL	DEOTH	CTCMA	61/4	THETA	C\:A	DELTA	DOT	Охү	SOUND
PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	THETA	SVA	DELTA	POT.	~ X 1	30000
			_	1			(THETA)	D	EN	6	4400
0	8.70	32.587	0	25.300	268.1	8.70	268.1	•00	•00	6.45	1482.
10	8.70	32.585	10	25,299	268.4	8.70	268.2	.27	.01	6.47	1483.
20	8.70	32.586	20	25.300	268.5	8.70	268.1	• 54	• 06	6.47	1483.
30	8.69	32.586	30	25.301	268.5	8.69	268.0	.81	•12	6.46	1483.
50	8.68	32.585	50	25.302	268.8	8.67	267.9	1.34	• 34	6.47	1483.
75	8.60	32.597	<b>7</b> 5	25.323	267.2	8.59	265.8	2.04	•79	6.47	1483.
100	5.56	32.963	99	26.022	200.6	5.55	199.4	2.61	1.30	6.28	1472.
125	5.36	33.469	124	26.444	160.8	5.35	159.3	3.07	1.82	5.19	1472.
150	5.57	33.742	149	26.635	143.1	5.56	141.2	3.45	2.35	3.91	1474.
175	5.61	33.808	174	26.683	138.8	5.59	136.6	3.80	2.93	3.55	1475.
200	5.42	33.848	199	26.736	134.0	5.40	131.5	4.14	3.58	3.28	1474.
225	5.09	33.858	223	26.783	129.6	5.07	127.0	4.47	4.30	2.92	1474.
250	4.80	33.868	248	26.824	125.9	4.78	123.2	4.79	5.07	2.61	1473.
300	4.42	33.890	298	26.883	120.6	4.40	117.6	5.41	6.80	2.18	1472.
400	4.05	33.988	397	27.000	110.1	4.02	106.4	6.56	10.90	1.61	1472.
500	3.85	34.087	496	27.099	101.4	3.81	96.9	7.61	15.74	1.15	1473.
600	3.65	34.154	595	27.172	95.1	3.61	90.0	8.60	21.26	.97	1474.
700	3.43	34.228	694	27.252	87.9	3.38	82.3	9.51	27.32	.73	1475.
800	3.24	34.292	793	27.321	81.8	3.18	75.7	10.36	33.79	.54	1476.
900	3.06	34.344	892	27.379	76.7	3.00	70.2	11.15	40.65	.48	1477.
1000	2.90	34.389	990	27.429	72.4	2.84	65.5	11.90	47.85	.44	1478.
1200	2.66	34.436	1188	27.487	67.4	2.58	59.8	13.29	63.53	.49	1480.
	_ , 00	0	2 2 0 0			_+50	0,10				



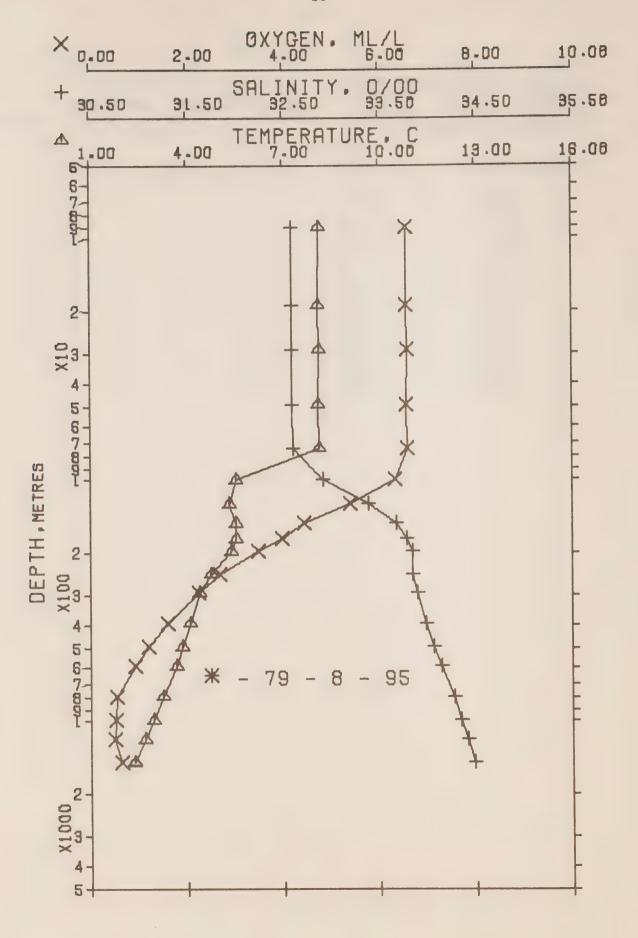
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 86 DATE 24/11/79 GMT 23.5 POSITION 50- .0 N. 145- .0 W

HYDROGRAPHIC CAST DATA

# OBSERVED DATA

TEMP	DEPTH
8.57	0
8.57	25
8.57	49
8.57	74
5.57	98
5.29	197
4.42	295
3.84	488
3.38	738
2.91	978
2.89	988
2.34	1477

STATION P



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 95
POSITION 50- .0 N, 145HYDROGRAPHIC CAST DATA

OFFSHORE OCEANOGRAPHY GROUP
DATE 29/11/79 GMT 18.2
OFFSHORE OCEANOGRAPHY GROUP
AND ADDRESS OF A CONTROL OF A CONT

STATION P

OBSERVED DATA

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	THETA	SVA (THETA)	DELTA	POT. EN	OXY	SOUND
0	8.12	32.597	0	25.395	259.1	8.12	259.1	.00	.00	6.53	1480.
9	8.13	32.597	9	25.394	259.4	8.13	259.2	•23	.01	6.58	1480.
19	8.12	32.599	19	25.397	259.2	8.12	258.9	•50	•05	6.58	1481.
29	8.13	32.598	29	25.394	259.6	8.13	259.1	•76	•11	6.59	1481.
49	8.11	32.598	49	25.397	259.6	8.11	258.8	1.28	•32	6.57	1481.
74	8.13	32.612	74	25.405	259.3	8.12	258.0	1.94	.74	6.59	1482.
101	5.54	32.923	100	25.992	203.4	5.53	202.2	2.54	1.28	6.34	1472.
127	5.33	33.389	126	25.385	166.4	5.32	164.9	3.03	1.83	5.40	1472.
152	5.52	33.683	151	26.594	146.9	5.51	145.0	3.42	2.39	4.44	1474.
176	5.52	33.794	175	26.682	138.9	5.51	136.7	3.77	2.97	3.98	1474.
199	5.38	33.851	198	20.744	133.3	5.36	130.8	4.08	3.57	3.48	1474.
247	4.76	33.853	245	26.816	126.6	4.74	123.9	4.70	4.97	2.68	1473.
296	4.39	33.902	294	20.896	119.3	4.37	116.3	5.30	6.65	2.25	1472.
396	4.09	33.988	393	26.995	110.6	4.06	106.8	6.45	10.69	1.59	1472.
497	3.85	34.070	493	27.085	102.7	3.81	98.3	7.53	15.59	1.20	1473.
597	3.68	34.154	592	27.169	95.4	3.64	90.3	8.52	21.11	.93	1474.
799	3.26	34.278	792	27.308	83.1	3.20	77.0	10.31	33.87	.55	1476.
1001	2.95	34.353	99.1	27.396	75.5	2.88	68.6	11.91	48.47	.52	1478.
1203	2.69	34.418	1191	27.471	69.0	2.61	61.4	13.37	64.91	.49	1480.
1495	2.35	34.491	1479	27.558	61.4	2.25	53.0	15.27	90.98	.64	1484.

OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 95 DATE 29/11/79 GMT 18.2
POSITION 50- .0 N. 145- .0 W
INTERPOLATED TO STANDARD PRESSURE

STATION P

THILL	LAILU	TO STAIND	AND FINE	33011							
PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	THETA	SVA	DELTA	POT.	OXY	SOUND
				Т			(THETA)	D	EN		
0	8.12	32.597	0	25.395	259.1	8.12	259.1	.00	.00	6.53	1480.
10	8.13	32.597	10	25.394	259.3	8.13	259.2	•26	.01	6.58	1480.
20	8.12	32.599	20	25.396	259.3	8.12	258.9	•52	• 05	6.58	1481.
30	8.13	32.598	30	25.394	259.6	8.13	259.1	•78	•12	6.59	1481.
50	8.11	32.598	50	25.397	259.6	8.11	258.8	1.30	•33	6.57	1481.
75	8.07	32.620	75	25.420	257.8	8.06	256.6	1.95	•75	6.59	1481.
100	5.59	32.917	99	25.981	204.4	5.59	203.3	2.53	1.26	6,35	1472.
125	5.34	33.360	124	26.360	168.7	5.33	167.2	3.00	1.80	5.46	1472.
150	5.51	33.661	149	26.579	148.3	5.49	146.5	3.39	2.35	4.51	1474.
175	5.52	33.789	174	26.678	139.3	5.51	137.1	3.75	2.94	4.00	1474.
200	5.37	33.851	199	26.745	133.2	5.35	130.7	4.09	3.59	3.47	1474.
225	5.03	33.852	223	26.785	129.4	5.01	126.8	4.42	4.30	3.02	1473.
250	4.73	33.856	248	26.822	126.0	4.71	123.3	4.74	5.07	2.64	1472.
300	4.38	33.906	298	26.900	118.9	4.35	115.9	5.35	6.79	2.22	1472.
400	4.08	33.992	397	26.999	110.2	4.05	106.5	6.49	10.87	1.58	1472.
500	3.84	34.073	496	27.088	102.5	3.81	98.0	7.56	15.75	1.19	1473.
600	3.67	34.156	595	27.171	95.2	3.63	90.1	8.54	21.28	.92	1474.
700	3.45	34.222	694	27.245	88.7	3.40	83.0	9.46	27.37	.72	1475.
800	3.26	34.278	<b>7</b> 93	27.308	83.1	3.20	77.0	10.32	33.92	• 55	1476.
900	3.10	34.318	892	27.354	79.1	3.03	72.5	11.13	40.94	•53	1477.
1000	2.95	34.353	990	27.396	75.6	2.88	68.6	11.90	48.42	•52	1478.
1200	2.69	34.417	1188	27.470	69.1	2.61	61.5	13.35	64.63	.49	1480.



Results of STD Observations

(P-79-8)

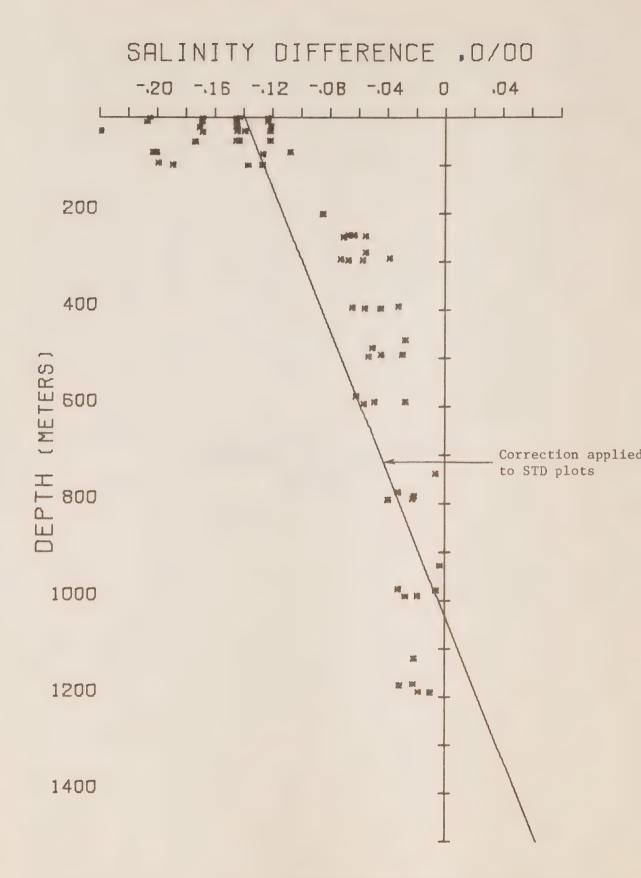


Figure 5. Salinity difference between hydro data and STD.

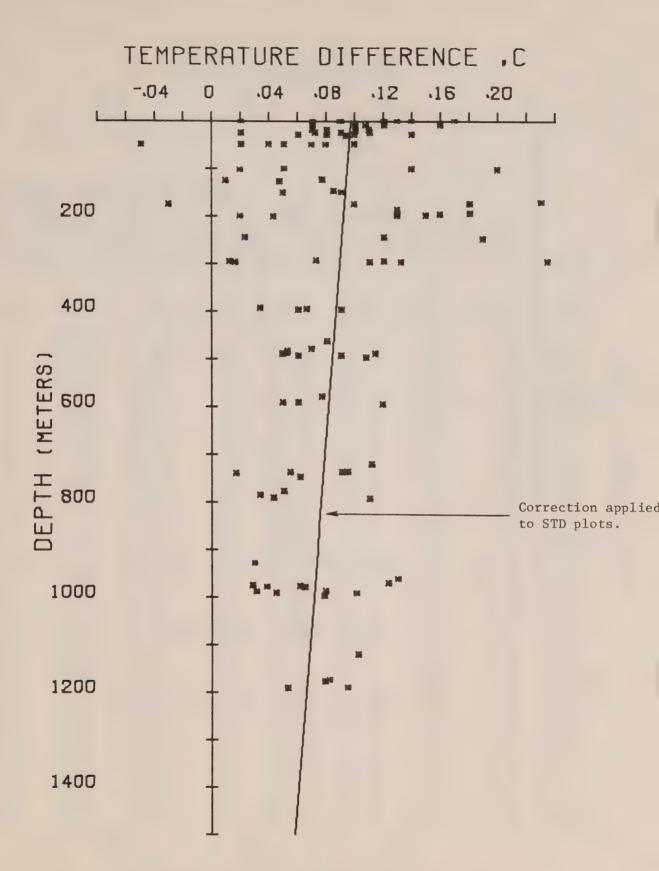
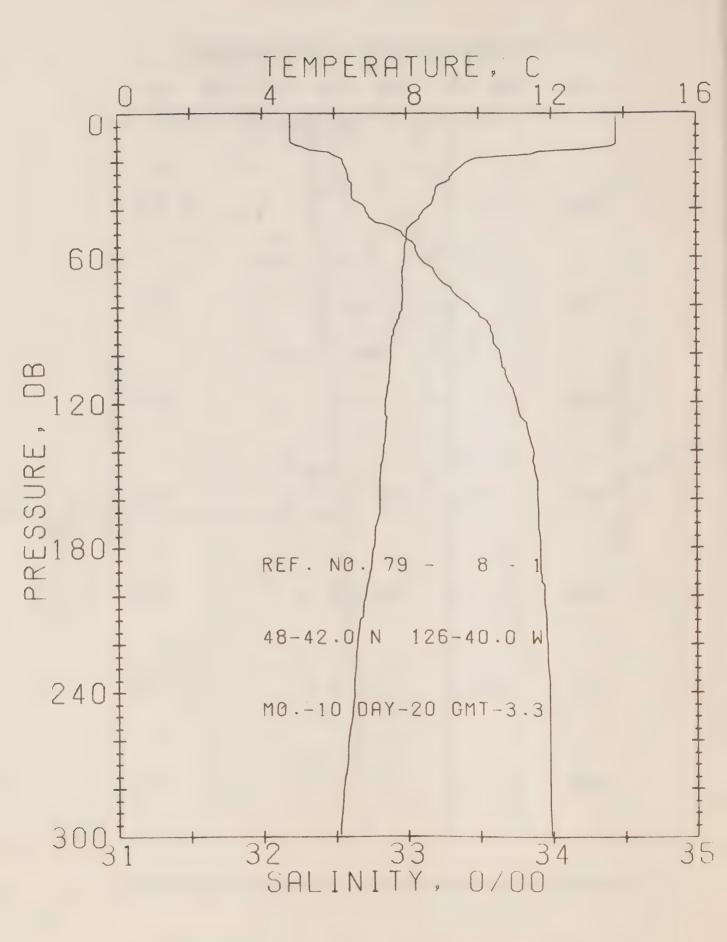
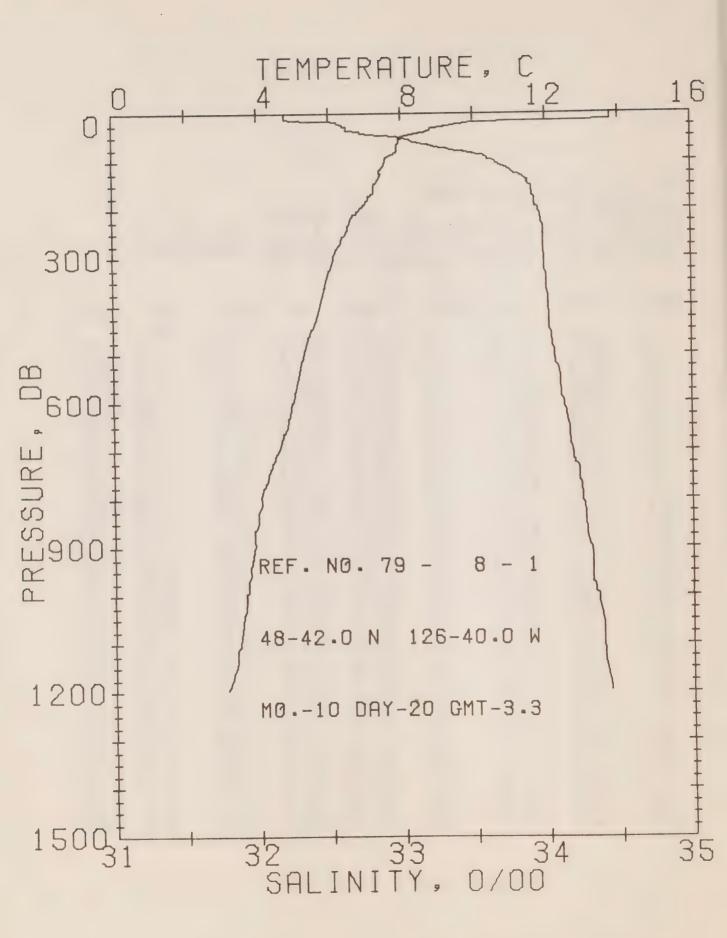


Figure 6. Temperature difference between hydro data and STD.



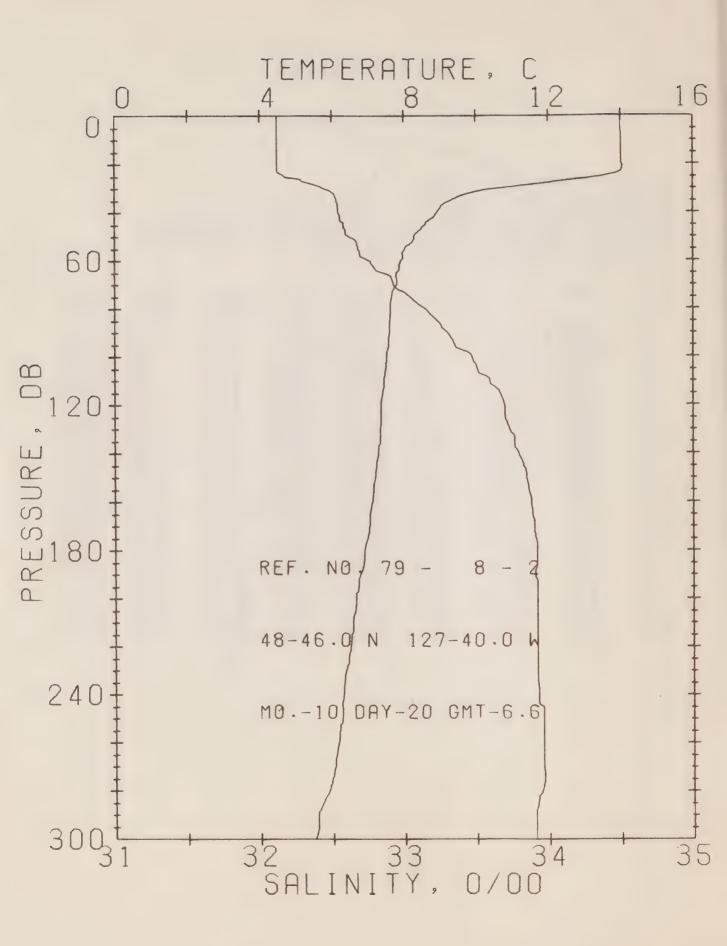
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 1 DATE 20/10/79
POSITION 48-42.0N, 126-40,0W GMT 3.3 STATION 3
RESULTS OF STP CAST 144 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
0	13.80	32.19	0	24.08	384.0	•00	• 00	1500.
10	13.80	32.19	10	24.08	384.3	•38	•02	1500.
20	9.77	32.55	20	25.11	286.9	•73	•07	1487.
30	8.87	32.62	30	25.30	268.6	1.01	.14	1484.
40	8.51	32.71	40	25.43	256.9	1.27	.24	1483.
50	8.00	32.97	50	25.70	230.5	1.52	• 35	1481.
60	7.94	33.09	60	25.81	220.9	1.74	•47	1481.
70	7.89	33.25	70	25.94	208.4	1.96	•62	1481.
80	7.88	33.44	80	26.09	194.3	2.16	•77	1482.
90	7.64	33.58	89	26.23	180.8	2.34	•93	1481.
100	7.55	33.64	99	26.30	174.8	2.52	1.10	1481.
110	7.50	33.69	109	26.34	171.0	2.69	1.29	1481.
120	7.39	33.76	119	26.41	164.4	2.86	1.48	1481.
130	7.41	33.83	129	26.47	159.4	3.02	1.69	1481.
140	7.32	33.88	139	26.51	155.2	3.18	1.91	1481.
150	7.24	33.89	149	26.53	153.1	3.34	2.14	1481.
160	7.23	33.90	159	26.54	152.3	3.49	2.38	1481.
170	7.15	33.91	169	26.56	150.8	3.64	2.63	1481.
180	7.06	33.92	179	26.58	149.0	3.79	2.90	1481.
190	6.97	33.92	189	26.59	147.9	3.94	3.18	1481.
200	6.84	33.95	199	26.64	144.1	4.08	3.47	1480.
210	6.68	33.96	209	26.67	141.4	4.23	3.77	1480.
220	6.60	33.97	218	26.68	139.8	4.37	4.08	1480.
230	6.55	33.97	228	26.69	139.0	4.51	4.40	1480.
240	6.50	33.98	238	26.70	138.0	4.65	4.73	1480.
250	6.45	33.98	248	26.71	137.5	4.78	5.07	1480.
260	6.34	33.98	258	26.73	136.2	4.92	5.43	1479.
270	6.30	33.98	268	26.73	135.8	5.06	5.79	1479.
280	6.21	33.98	278	26.74	134.8	5.19	6.17	1479.
290	6.16	33.98	288	26.75	134.1	5.33	6.56	1479.
300	6.11	33.99	298	26.76	133.1	5.46	6.96	1479.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 1 DATE 20/10/79
POSITION 48-42.0N, 126-40.0W GMT 3.3 STATION 3
RESULTS OF STP CAST 293 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	13.80	32.19	0	24.08	384.0	•00	•00	1500.
10	13.80	32.19	10	24.08	384.3	•38	.02	1500.
20	9'.77	32.55	20	25.11	286.9	•73	.07	1487.
30	8'.87	32.62	30	25.30	268.6	1.01	.14	1484.
50	8.00	32.97	50	25.70	230.5	1.52	•35	1481.
75	7.90	33.34	75	26.01	202.0	2.06	•69	1482.
100	7.55	33.64	99	26.30	174.8	2.52	1.10	1481.
125	7.39	33.78	124	26.43	163.0	2.94	1.59	1481.
150	7.24	33.89	149	26.53	153.1	3.34	2.14	1481.
175	7.09	33.92	174	26.58	149.6	3.72	2.76	1481.
200	b • 84	33.95	199	26.64	144.1	4.08	3.47	1480.
225	6.57	33.97	223	26.69	139.4	4.44	4.23	1480.
250	6.45	33.98	248	26.71	137.5	4.78	5.07	1480.
300	6.11	33.99	298	26.76	133.1	5.46	6.96	1479.
400	5.71	34.01	397	26.83	127.8	6.76	11.61	1479.
500	5.26	34.05	496	26.92	120.4	8.00	17.30	1479.
600	4.95	34.12	595	27.01	112.5	9.17	23.83	1479.
800	4.06	34.24	793	27.20	95.0	11.25	38.60	1479.
1000	3.63	34.35	991	27.33	83.4	13.04	55.01	1481.
1200	3.03	34.43	1188	27.45	71.9	14.59	72.31	1482.



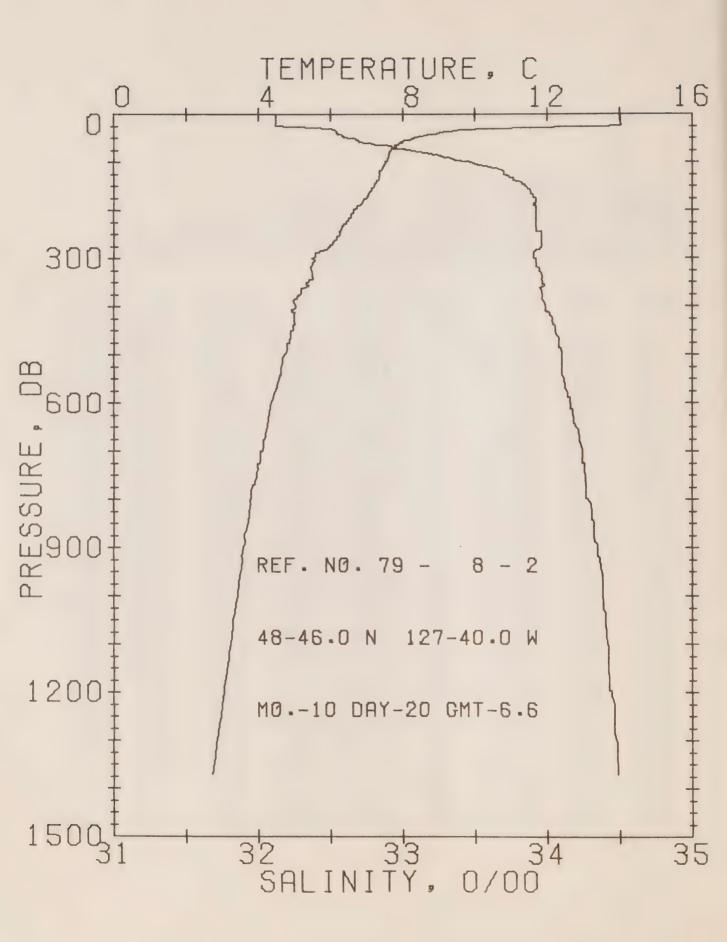
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 2 DATE 20/10/79

POSITION 48-46.0N, 127-40,0W GMT 6.6 STATION 4

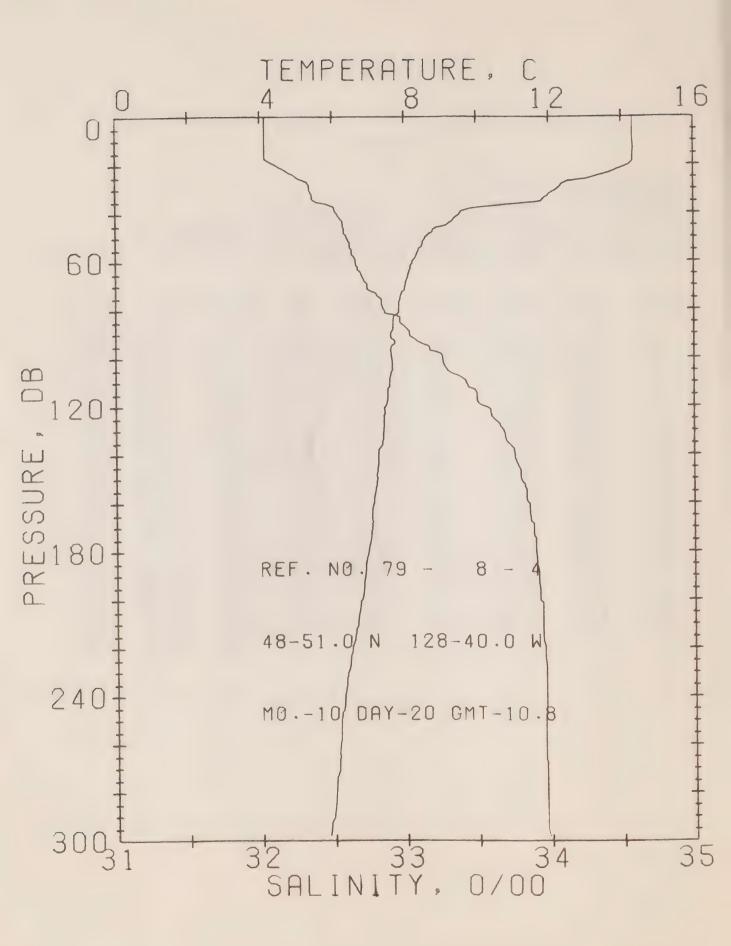
RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
υ	14.01	32.12	0	23.99	393.3	•00	.00	1501.
10	14.02	32.12	10	23.98	393.7	• 39	.02	1501.
20	14.04	32.12	20	23.98	394.3	•79	•08	1501.
30	10.70	32.45	30	24.87	309.8	1.16	.17	1490.
40	8.92	32.55	40	25.23	275.1	1.44	•27	1484.
50	8.28	32.62	50	25.39	260.4	1.71	.40	1482.
60	7.91	32.77	60	25.56	244.2	1.96	•54	1481.
70	7.80	32.93	70	25.70	231.0	2.20	•70	1481.
80	7.63	33.15	80	25.90	212.4	2.42	.86	1480.
90	7.59	33.31	89	26.03	200.1	2.63	1.04	1481.
100	7.52	33.48	99	26.17	187.0	2.82	1.23	1481.
110	7.44	33.59	109	26.28	177.1	3.00	1.43	1481.
120	7.37	33.70	119	26.37	168.6	3.18	1.63	1481.
130	7.34	33.73	129	26.39	166.1	3.34	1.84	1481.
140	7.27	33.80	139	26.46	160.5	3.51	2.07	1481.
150	7.19	33.85	149	26.51	155.5	3.66	2.30	1481.
160	7.11	33.88	159	26.54	152.3	3.82	2.54	1481.
170	7.03	33.90	169	26.57	149.9	3.97	2.80	1480.
180	6.90	33.92	179	26.60	146.8	4.12	3.06	1480.
190	6.77	33.91	189	26.61	146.0	4.26	3.34	1480.
200	6.64	33.92	199	26.64	143.7	4.41	3.63	1479.
210	6.57	33.92	209	26.65	142.9	4.55	3.93	1479.
220	6.49	33.92	219	26.66	142.0	4.69	4.24	1479.
230	6.36	33.92	228	26.68	140.5	4.84	4.56	1479.
240	6.30	33.93	238	26.69	139.1	4.98	4.90	1479.
250	6.24	33.96	248	26.72	136.3	5.11	5.24	1479.
260	6.15	33.96	258	26.73	135.3	5.25	5.59	1479.
270	6.04	33.96	268	26.75	134.0	5.38	5.96	1478.
280	5.89	33.95	278	26.76	132.7	5.52	6.33	1478.
290	5.58	33.91	288	26.77	132.3	5.65	6.71	1477.
300	5.50	33.91	298	26.78	131.4	5.78	7.11	1476.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 2 DATE 20/10/79
POSITION 48-46.0N, 127-40.0W GMT 6.6 STATION 4
RESULTS OF STP CAST 395 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	14.01	32.12	0	23.99	393.3	•00	•00	1501.
10	14.02	32.12	10	23.98	393.7	• 39	.02	1501.
20	14.04	32.12	20	23.98	394.3	•79	.08	1501.
30	10.70	32.45	30	24.87	309.8	1.16	.17	1490.
50	8 • 28	32.62	50	25.39	260.4	1.71	.40	1482.
75	7.66	33.04	75	25.81	220.9	2.31	•78	1480.
100	7.52	33.48	99	26.17	187.0	2.82	1.23	1481.
125	7.37	33.70	124	26.37	168.7	3.26	1.74	1481.
150	7.19	33.85	149	26.51	155.5	3.66	2.30	1481.
175	6.97	33.91	174	26.59	148.2	4.04	2.93	1480.
200	6.64	33.92	199	26.64	143.7	4.41	3.63	1479.
225	6.43	33.92	223	26.67	141.3	4.77	4.40	1479.
250	6.24	33.96	248	20.72	136.3	5.11	5.24	1479.
300	5.50	33.91	298	26.78	131.4	5.78	7.11	1476.
400	5.03	33.99	397	26.89	121.0	7.04	11.60	1476.
500	4.72	34.10	496	27.02	110.2	8.20	16.89	1477.
600	4:34	34.15	595	27.10	102.8	9.27	22.92	1477.
800	3.76	34.28	793	27.26	88.8	11.18	36.46	1478.
1000	3.40	34.38	991	27.38	78.4	12.83	51.59	1480.
1200	3.04	34.44	1188	27.46	71.4	14.32	68.33	1482.



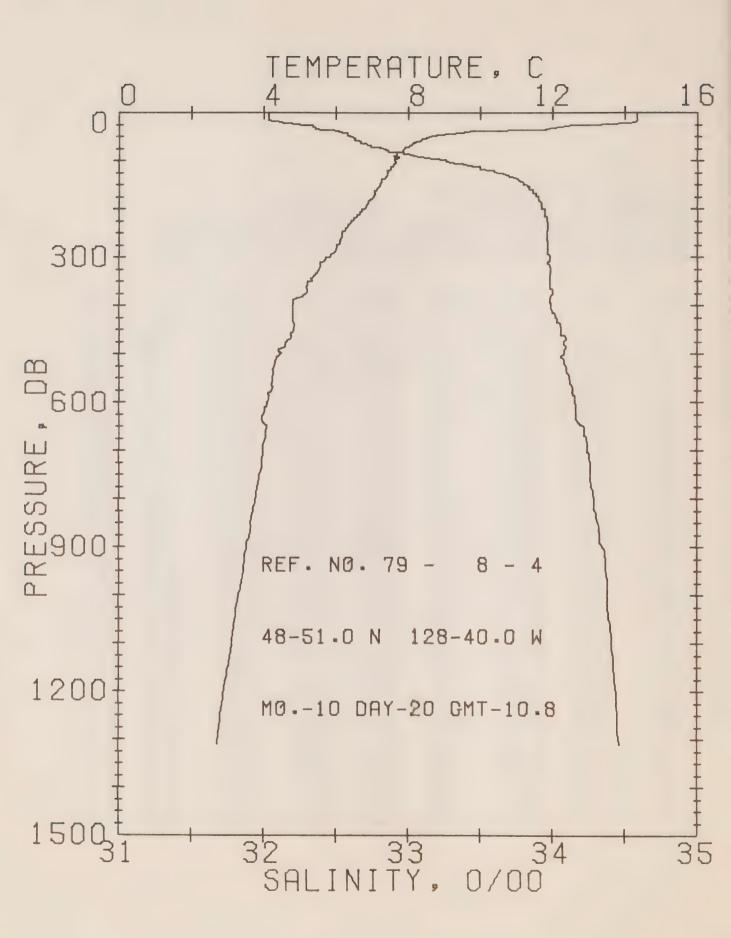
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 4 DATE 20/10/79

POSITION 48-51.0N, 128-40,0W GMT 10.8 STATION 5

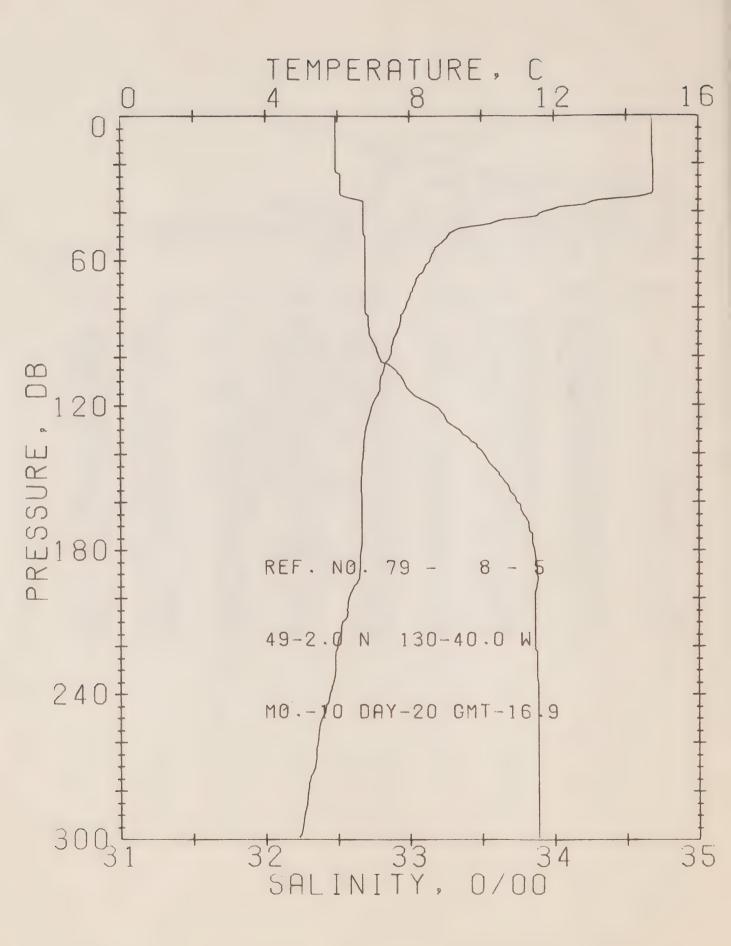
RESULTS OF STP CAST 196 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
	# 4. *** ·	7.0.07		T		D	EN	
0	14.32	32.03	0	23.85	406.0	•00	.00	1502.
10	14.33	32.03	10	23.85	406.5	•41	.02	1502.
20	14.24	32.11	20	23.93	399.0	•81	•08	1502.
30	12.24	32.34	30	24.50	344.6	1.18	•18	1495.
40	9.55	32.53	40	25.12	285.7	1.50	•29	1486.
50	8.58	32.60	50	25.33	266.2	1.78	•42	1483.
60	8.22	32.66	60	25.43	256.7	2.04	•56	1482.
70	8.01	32.74	70	25.52	248.1	2.29	•73	1481.
80	7.83	32.86	80	25.64	236.7	2.53	.91	1481.
90	7.60	33.03	90	25.81	221.1	2.76	1.11	1480.
100	7.64	33.26	99	25.99	204.4	2.97	1.32	1481.
110	7.57	33.43	109	26.13	191.3	3.17	1.53	1481.
120	7.46	33.56	119	26.24	180.2	3.36	1.75	1481.
130	7.40	33.68	129	26.35	170.3	3.53	1.97	1481.
140	7.25	33.76	139	26.43	162.8	3.70	2.20	1481.
150	7.22	33.80	149	26.47	159.6	3.86	2.44	1481.
160	7.11	33.86	159	26.53	153.8	4.02	2.69	1481.
170	7.06	33.89	169	26.56	151.1	4.17	2.94	1481.
180	6.95	33.90	179	26.58	149.0	4.32	3.21	1480.
190	6.86	33.92	189	26.61	146.5	4.47	3.49	1480.
200	6.77	33.93	199	26.63	144.7	4.61	3.78	1480.
210	6.66	33.95	209	26.66	141.8	4.75	4.08	1480.
220	6.49	33.96	219	26.69	139.1	4.90	4.38	1479.
230	6.38	33.97	228	26.71	137.0	5.03	4.70	1479.
240	6.27	33.97	238	26.73	135.8	5.17	5.03	1479.
250	6.18	33.96	248	26.73	135.4	5.31	5.37	1478.
260	6.14	33.96	258	26.74	135.1	5.44	5.72	1479.
270	6.10	33.97	268	26.75	134.1	5.58	6.08	1479.
280	6.00	33.97	278	26.76	132.9	5.71	6.45	1478.
290	5.96	33.97	288	26.77	132.5	5.84	6.84	1478.
300	5.83	33.98	298	26.79	130.2	5.97	7.24	1478.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 4 DATE 20/10/79
POSITION 48-51.0N, 128-40,0W GMT 10.8 STATION 5
RESULTS OF STP CAST 393 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
Ü	14,32	32.03	0	T 23.85	406.0	• 0 0	EN •00	1502.
10	14.33	32.03	10	23.85	406.5	•41	•02	1502.
20	14.24	32.11	20	23.93	399.0			
						.81	•08	1502.
30	12.24	32.34	30	24.50	344.6	1.18	•18	1495.
50	8.58	32.60	50	25.33	266.2	1.78	.42	1483.
75	7.88	32.84	75	25.62	238.8	2.41	•82	1481.
100	7.64	33.26	99	25.99	204.4	2.97	1.32	1481.
125	7.42	33.62	124	26.30	175.3	3.45	1.86	1481.
150	7.22	33.80	149	26.47	159.6	3.86	2.44	1481.
175	7.02	33.90	174	26.57	149.9	4.24	3.08	1481.
200	6.77	33.93	199	26.63	144.7	4.61	3.78	1480.
225	6.43	33.96	223	26.70	138.2	4.96	4.54	1479.
250	6.18	33.96	248	26.73	135.4	5.31	5.37	1478.
300	5,83	33.98	298	26.79	130.2	5.97	7.24	1478.
400	4.81	33.99	397	26.92	118.5	7.21	11.64	1475.
500	4.45	34.08	496	27.03	108.6	8.35	16.84	1476.
600	4.08	34.15	595	27.12	100.2	9.39	22.69	1476.
800	3.78	34.29	793	27.26	88.2	11.26	36.01	1478.
1000	3.31	34.38	991	27.38	77.5	12.91	51.05	1479.
1200	2.90	34.44	1188	27.47	69.9	14.38	67.58	1481.



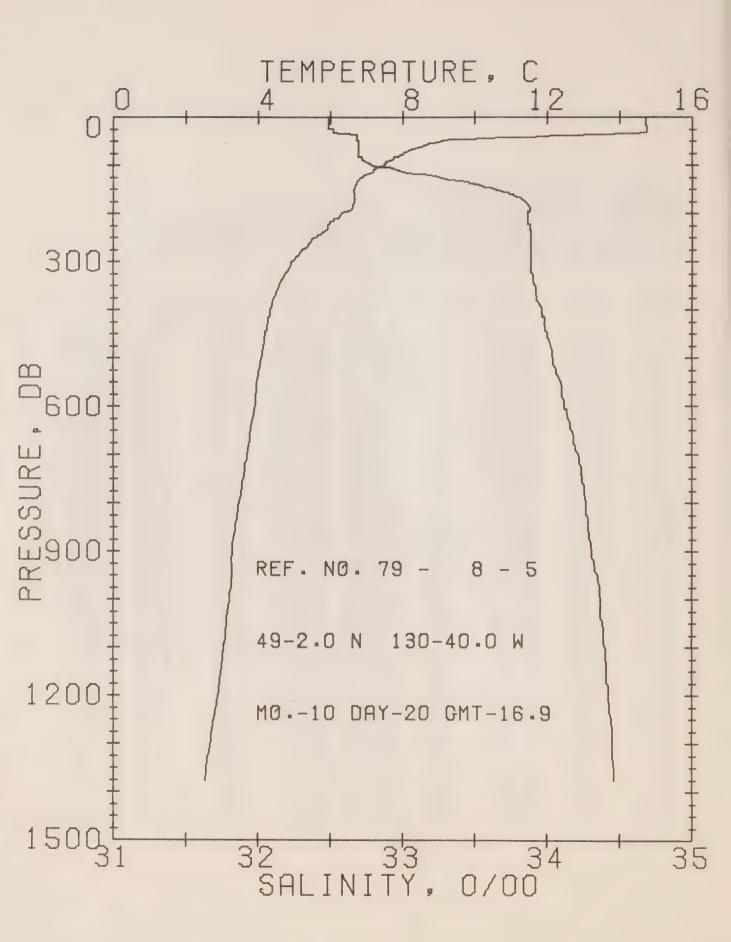
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 5 DATE 20/10/79

POSITION 49- 2.0N, 130-40,0W GMT 16.9 STATION 6

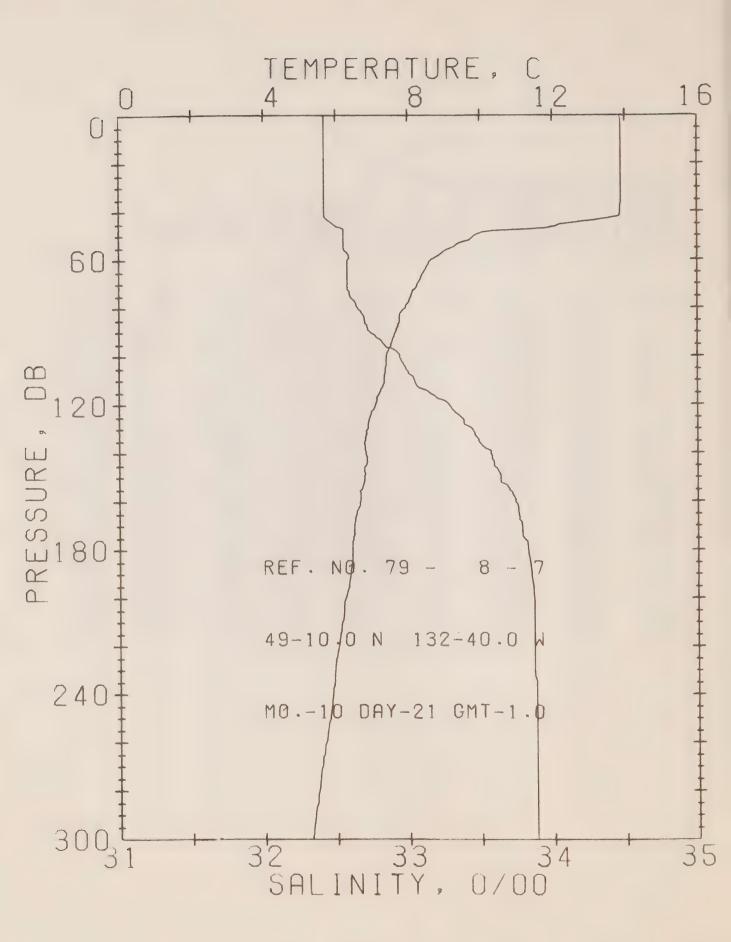
RESULTS OF STP CAST 176 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	14.70	32.49	0	24.13	379.9	•00	•00	1503.
10	14.72	32.49	10	24.12	380.6	•38	.02	1504.
20	14.74	32.49	20	24.12	381.2	•76	.08	1504.
30	14.74	32.52	30	24.14	379.3	1.14	•17	1504.
40	11.72	32.68	40	24.86	310.5	1.49	.30	1494.
50	9'.07	32.69	50	25.32	266.7	1.78	•43	1485.
60	8.57	32.69	60	25.40	259.5	2.04	•58	1483.
70	8.15	32.69	70	25.46	253.7	2.29	.75	1482.
80	7.90	32.69	80	25.50	250.3	2.55	.94	1481.
90	7.65	32.72	90	25.56	244.7	2.79	1.15	1480.
100	7,45	32.79	99	25.64	237.0	3.03	1.39	1480.
110	7.18	32.96	109	25.81	220.9	3.26	1.63	1479.
120	6.96	33.16	119	26.00	203.3	3.48	1.88	1478.
130	6.77	33.35	129	26.17	186.8	3.67	2.13	1478.
140	6.70	33.51	139	26.31	174.2	3.85	2.38	1478.
150	6.65	33.64	149	26.42	164.0	4.02	2.63	1478.
160	6.66	33.74	159	26.50	156.8	4.18	2.88	1479.
170	6.68	33.82	169	26.56	150.8	4.34	3.14	1479.
180	6.62	33.86	179	26.60	147.4	4.48	3.40	1479.
190	6.60	33.88	189	26.61	146.0	4.63	3.68	1479.
200	6.29	33.87	199	26.65	142.9	4.78	3.97	1478.
210	6.12	33.87	209	26.67	140.9	4.92	4.27	1477.
550	5.98	33.87	219	26.69	139.3	5.06	4.57	1477.
230	5.91	33.88	228	26.70	137.8	5.20	4.89	1477.
240	5.77	33.89	238	26.73	135.5	5.33	5.22	1477.
250	5,55	33.89	248	26.75	132.9	5.47	5.55	1476.
260	5.43	33.89	258	26.77	131.6	5.60	5.90	1476.
270	5.35	33.89	268	26.78	130.8	5.73	6.25	1475.
280	5.16	33.89	278	26.80	128.6	5.86	6.61	1475.
290	5.05	33.89	288	20.81	127.5	5.99	6.99	1474.
300	4.91	33.89	298	26.83	126.0	6.12	7.37	1474.



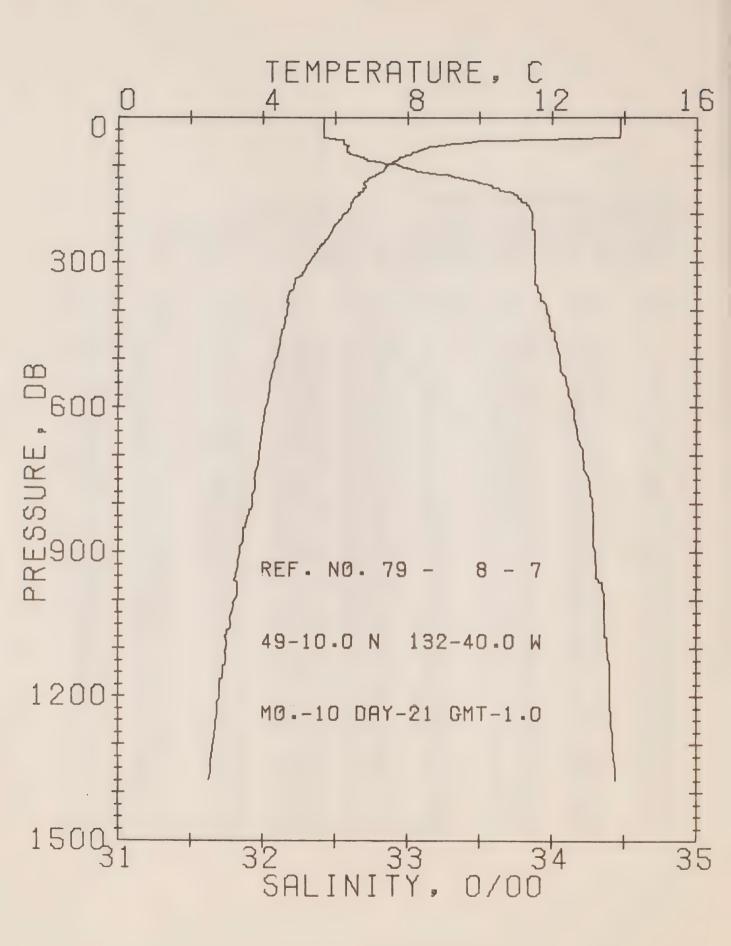
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79-8-5 DATE 20/10/79
POSITION 49-2.0N, 130-40.0W GMT 16.9 STATION 6
RESULTS OF STP CAST 334 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	14.70	32.49	0	24.13	379.9	•00	.00	1503.
10	14.72	32.49	10	24.12	380.6	•38	.02	1504.
20	14.74	32.49	20	24.12	381.2	.76	.08	1504.
36	14.74	32.52	30	24.14	379.3	1.14	.17	1504.
50	9.07	32.69	50	25.32	266.7	1.78	.43	1485.
75	8.02	32.69	75	25.48	251.9	2.42	.84	1481.
100	7.45	32.79	99	25.64	237.0	3.03	1.39	1480.
125	6.85	33.25	124	26.08	195.5	3.58	2.00	1478.
150	6.65	33.64	149	26.42	164.0	4.02	2.63	1478.
175	6.67	33.85	174	26.58	149.0	4.41	3.27	1479.
200	6.29	33.87	199	26.65	142.9	4.78	3.97	1478.
225	5.92	33.88	223	26.70	137.9	5.13	4.73	1477.
250	5.55	33.89	248	26.75	132.9	5.47	5.55	1476.
300	4.91	33.89	298	26.83	126.0	6.12	7.37	1474.
400	4.33	33.96	397	26.95	115.3	7.33	11.68	1473.
500	4.08	34.04	496	27.03	107.7	8.44	16.78	1474.
600	3.91	34.12	595	27.12	100.8	9.48	22.59	1475.
800	3.46	34.27	793	27.28	85.9	11.33	35.78	1477.
1000	3.20	34.37	991	27.38	77.2	12.97	50.75	1479.
1200	2.88	34.42	1188	27.46	71.0	14.45	67.33	1481.



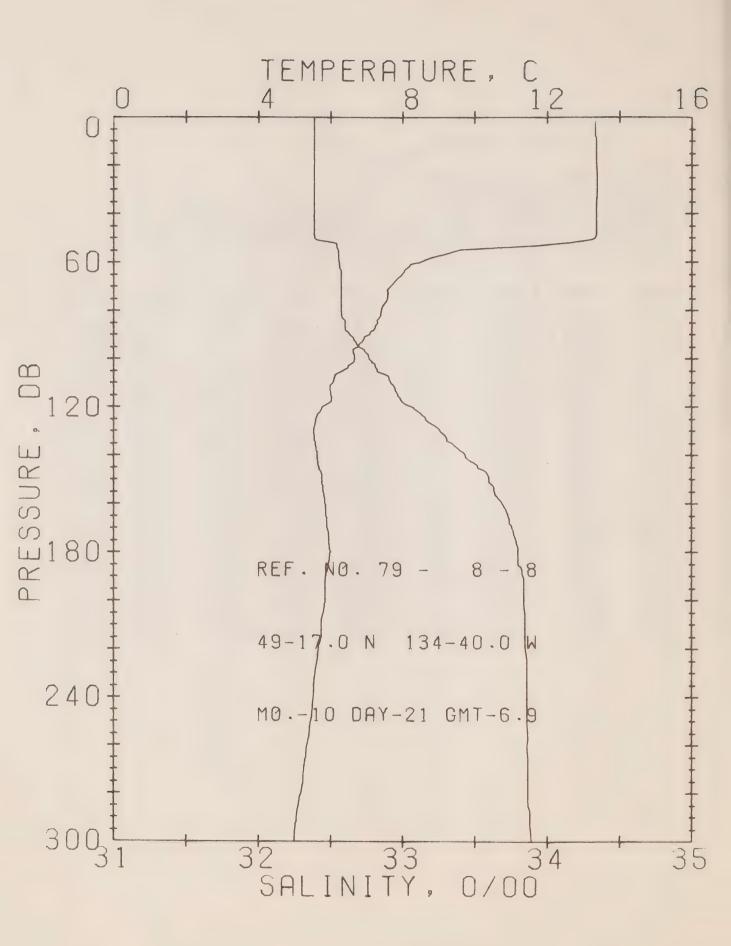
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 7 DATE 21/10/79
POSITION 49-10.0N, 132-40.0W GMT 1.0 STATION 7
RESULTS OF STP CAST 188 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
0	13.88	32.42	0	24.24	368.7	•00	•00	1501.
10	13.89	32.42	10	24.24	369.2	•37	.02	1501.
20	13.90	32.42	20	24.24	369.6	•74	.08	1501.
30	13.90	32.42	30	24.24	369.9	1.11	.17	1501.
40	13.87	32.42	40	24.24	369.6	1.48	•30	1501.
50	9.84	32.55	50	25.09	289.0	1.81	•45	1487.
60	8.65	32.58	60	25.30	268.9	2.09	.61	1483.
70	8.28	32.58	70	25.36	263.7	2.36	•79	1482.
80	7.91	32.65	80	25.47	253.4	2.62	•98	1481.
90	7.66	32.74	90	25.57	243.5	2.86	1.20	1480.
100	7.40	32.94	99	25.77	225.2	3.10	1.43	1480.
110	7.33	33.04	109	25.86	216.8	3.32	1.66	1480.
120	7.09	33.29	119	26.08	195.3	3.53	1.90	1479.
130	6.87	33.45	129	26.24	180.7	3.71	2.14	1479.
140	6.84	33.57	139	26.34	171.5	3.89	2.39	1479.
150	6.78	33.64	149	26.40	165.7	4.06	2.64	1479.
160	6.66	33.74	159	26.50	156.8	4.22	2.89	1479.
170	6.49	33.79	169	26.56	151.0	4.37	3.15	1478.
180	6.42	33.83	179	26.60	147.3	4.52	3.42	1478.
190	6.37	33.85	189	26.62	145.3	4.67	3.69	1478.
200	6.24	33.87	199	26.65	142.3	4.81	3.98	1478.
210	6.14	33.87	209	26.67	141.2	4.96	4.27	1478.
220	6.04	33.87	219	26.68	140.0	5.10	4.58	1477.
230	5.93	33.87	228	26.69	138.9	5.24	4.90	1477.
240	5.86	33.88	238	26.71	137.3	5.37	5.23	1477.
250	5.78	33.88	248	26.72	136.5	5.51	5.57	1477.
260	5.67	33.88	258	26.73	135.3	5.65	5.93	1476.
270	5.57	33.88	268	26.74	134.2	5.78	6.29	1476.
280	5.47	33.88	278	26.76	133.1	5.91	6.66	1476.
290	5.36	33.88	288	26.77	131.9	6.05	7.05	1476.
300	5.28	33.88	298	26.78	131.1	6.18	7.45	1476.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 7 DATE 21/10/79
POSITION 49-10.0N, 132-40.0W GMT 1.0 STATION 7
RESULTS OF STP CAST 400 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	13.88	32.42	Q	24.24	368.7	•00	.00	1501.
10	13.89	32.42	10	24.24	369.2	• 37	•02	1501.
20	13.90	32,42	20	24.24	369.6	.74	•08	1501.
30	13.90	32.42	30	24.24	369.9	1.11	.17	1501.
50	9.84	32.55	50	25.09	289.0	1.81	•45	1487.
75	8.07	32.60	75	25.40	259.3	2.49	•88	1481.
100	7.40	32.94	99	25.77	225.2	3.10	1.43	1480.
125	6.93	33.37	124	26.17	187.4	3.62	2.02	1479.
150	6.78	33.64	149	26.40	165.7	4.06	2.64	1479.
175	6.46	33.80	174	26.57	150.0	4.45	3.28	1478.
200	6.24	33.87	199	26.65	142.3	4.81	3.98	1478.
225	5.98	33.87	223	26.69	139.4	5.17	4.74	1477.
250	5.78	33.88	248	26.72	136.5	5.51	5.57	1477.
300	5.28	33.88	298	26.78	131.1	6.18	7.45	1476.
400	4.67	33.97	397	26.92	118.3	7.43	11.89	1475.
500	4.34	34.05	496	27.02	109.6	8.57	17.12	1475.
600	4.07	34.14	595	27.12	100.5	9.62	23.02	1476.
800	3.70	34.28	793	27.27	87.8	11.51	36.43	1478.
1000	3.24	34.36	991	27.38	78.2	13.17	51.67	1479.
1200	2.80	34.40	1188	27.45	71.6	14.66	68.33	1481.



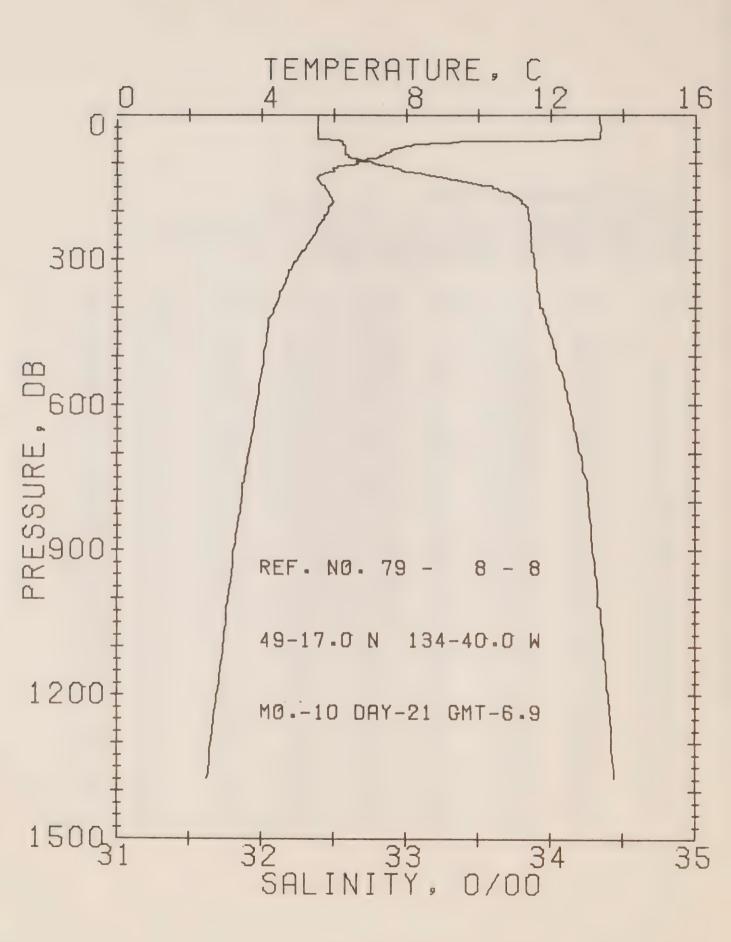
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 8 DATE 21/10/79

POSITION 49-17.0N, 134-40.0W GMT 6.9 STATION 8

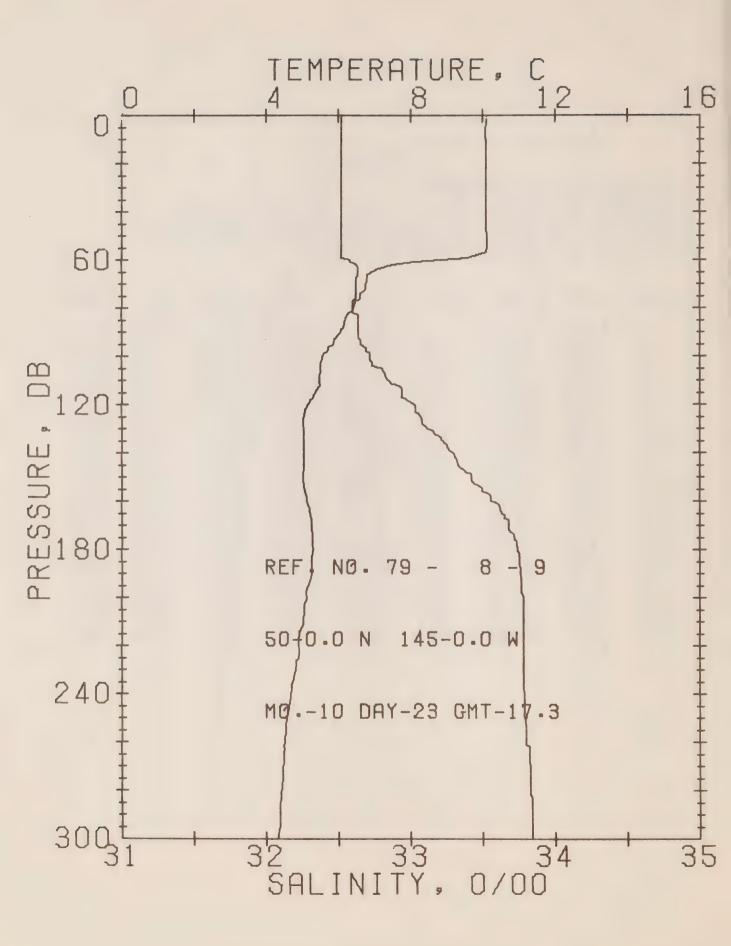
RESULTS OF STP CAST 162 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Ŧ		D	EN	
0	13.32	32.39	0	24.33	360.2	•00	.00	1499.
10	13.36	32.39	10	24.33	361.1	• 36	.02	1499.
20	13.37	32.39	20	24.32	361.7	•72	.07	1499.
30	13.38	32.39	30	24.32	362.0	1.08	.17	1499.
40	13.37	32.39	40	24.32	362.1	1.45	.30	1500.
50	13.32	32.39	50	24.33	361.4	1.81	.46	1500.
60	8.48	32.56	60	25.31	267.9	2.11	•63	1483.
70	7:66	32.57	70	25.44	255.8	2.37	.80	1480.
80	7.40	32.57	80	25.48	252.4	2.62	1.00	1479.
90	7:06	32.63	90	25.57	243.7	2.87	1.21	1478.
100	6.66	32.77	99	25.73	228.2	3.11	1.44	1476.
110	6.06	32.92	109	25.93	209.8	3.33	1.67	1474.
120	5.76	33.07	119	26.08	195.1	3.53	1.91	1474.
130	5.52	33.20	129	26.26	178.2	3.72	2.15	1473.
140	5,62	33.43	139	26.39	166.4	3.89	2.39	1474.
150	5,76	33.60	149	26.50	155.9	4.05	2.62	1475.
160	5.85	33.69	159	26.56	150.4	4.20	2.87	1475.
170	5.90	33.76	169	26.61	145.9	4.35	3.11	1476.
180	6.00	33.80	179	26.63	144.3	4.50	3.37	1476.
190	5,86	33.84	189	26.67	140.0	4.64	3.64	1476.
200	5.84	33.84	199	26.68	139.6	4.78	3.92	1476.
210	5.73	33.85	209	26.70	137.6	4.92	4.21	1476.
220	5.64	33.85	219	26.71	136.6	5.05	4.51	1476.
230	5.56	33.86	228	26.73	135.1	5.19	4.82	1476.
240	5.51	33.86	238	26.74	134.5	5.32	5.14	1475.
250	5.45	33.86	248	26.74	134.0	5.46	5.48	1475.
260	5.34	33.86	258	26.76	132.8	5.59	5.82	1475.
270	5.25	33.87	268	26.77	131.1	5.72	6.18	1475.
280	5.18	33.87	278	26.78	130.4	5.85	6.55	1475.
290	5.05	33.88	288	26.81	128.3	5.98	6.92	1474.
300	4.98	33.89	298	26.82	126.8	6.11	7.31	1474.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 8 DATE 21/10/79
POSITION 49-17.0N, 134-40,0W GMT 6.9 STATION 8
RESULTS OF STP CAST 336 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	13.32	32.39	Q	24.33	360.2	•00	.00	1499.
16	13.36	32.39	10	24.33	361.1	• 36	.02	1499.
20	13.37	32.39	20	24.32	361.7	.72	.07	1499.
30	13.38	32.39	30	24.32	362.0	1.08	.17	1499.
50	13.32	32.39	50	24.33	361.4	1.81	.46	1500.
75	7.57	32.57	75	25.45	254.7	2.50	•90	1479.
100	6.66	32.77	99	25.73	228.2	3.11	1.44	1476.
125	5.58	33.16	124	26.17	186.4	3.63	2.03	1473.
150	5.76	33.60	149	26.50	155.9	4.05	2.62	1475.
175	5.94	33.79	174	26.63	144.2	4.42	3.24	1476.
200	5.84	33.84	199	26.68	139.6	4.78	3.92	1476.
225	5.61	33.86	223	26.72	135.6	5.12	4.66	1476.
250	5.45	33.86	248	26.74	134.0	5.46	5.48	1475.
300	4.98	33.89	298	26.82	126.8	6.11	7.31	1474.
400	4.33	33.93	397	26.93	117.2	7.33	11.65	1473.
500	4.05	34.03	496	27.04	107.5	8.45	16.76	1474.
600	3.86	34.13	595	27.13	99.2	9.48	22.55	1475.
800	3.43	34.26	793	27.28	86.3	11.33	35.68	1477.
1000	3.07	34.33	991	27.37	78.5	12.98	50.77	1478.
1200	2.76	34.40	1188	27.45	71.1	14.47	67.53	1480.



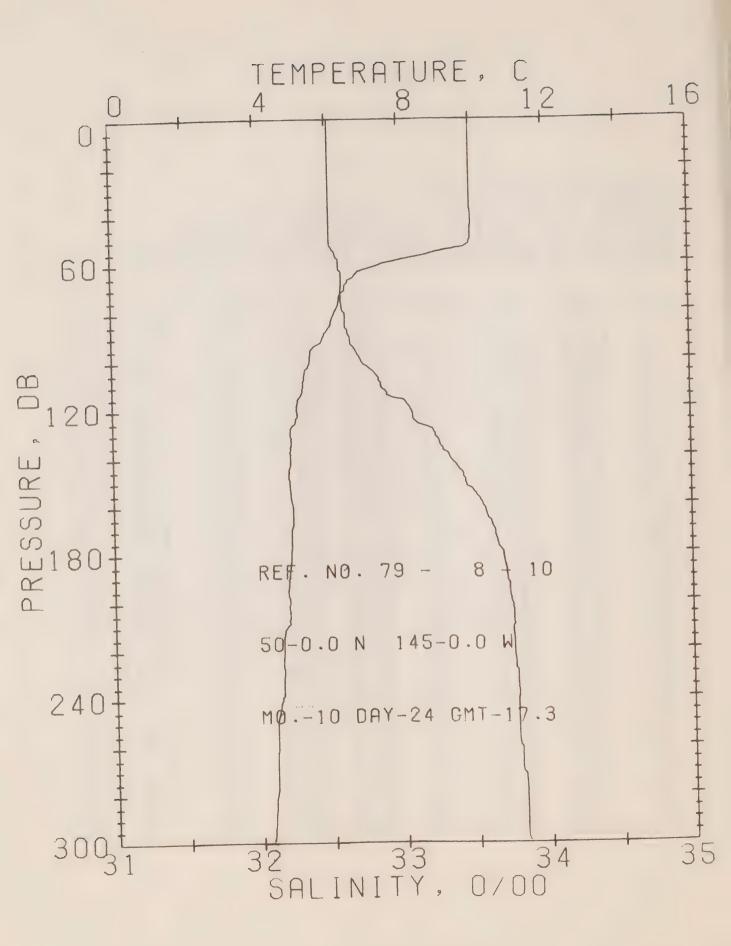
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 9 DATE 23/10/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

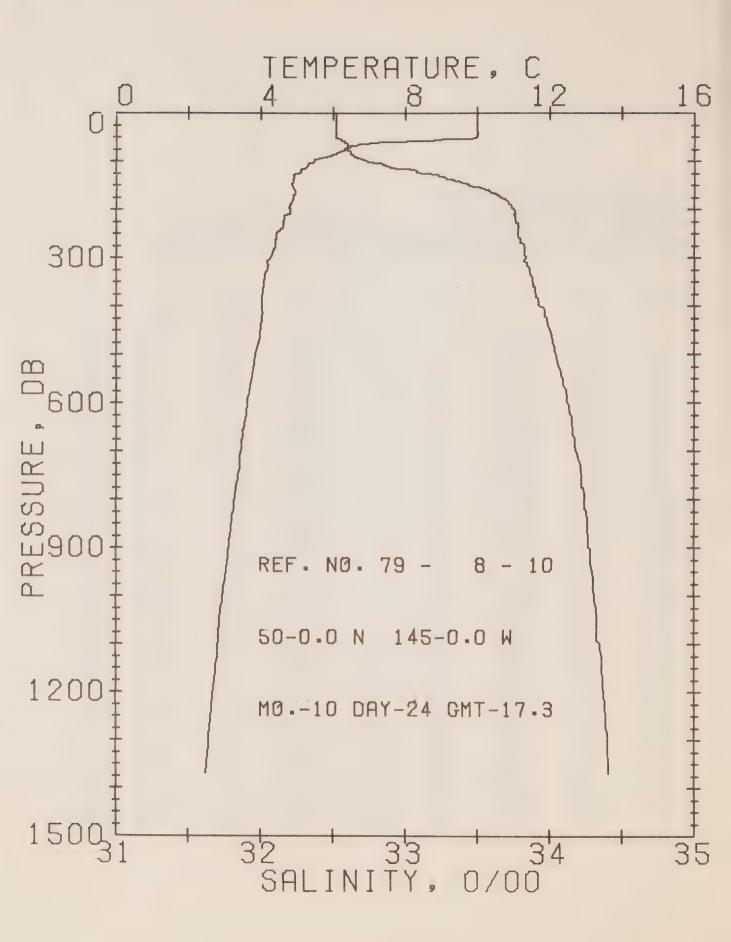
RESULTS OF STP CAST 187 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	10.11	32.52	0	25.02	294.5	•00	.00	1488.
10	10.10	32.52	10	25.02	294.6	•29	.02	1488.
20	10.11	32.52	20	25.02	294.9	•59	• 06	1488.
30	10.12	32.52	30	25.02	295.2	•88	.14	1488.
40	10.12	32.52	40	25.02	295.4	1.18	.24	1488.
50	10.13	32.52	50	25.02	295.8	1.48	• 38	1488.
60	8.82	32.58	60	25.28	271.3	1.77	•54	1484.
70	6.76	32.62	70	25.60	240.3	2.01	.70	1476.
80	6.39	32.60	80	25.63	237.3	2.25	•89	1475.
90	6.05	32.63	89	25.70	231.1	2.49	1.09	1474.
100	5.55	32.71	99	25.82	219.4	2.71	1.31	1472.
110	5.46	32.84	109	25.94	208.4	2.93	1.54	1472.
120	5.14	33.02	119	26.12	191.8	3.13	1.77	1471.
130	5.03	33.11	129	26.20	183.9	3.31	2.01	1471.
140	5.05	33.28	139	26.33	171.2	3.49	2.25	1471.
150	5.02	33.42	149	26.44	160.8	3.66	2.50	1471.
160	5.12	33.56	159	26.54	151.6	3.81	2.75	1472.
170	5.25	33.68	169	26.62	144.2	3.96	2.99	1473.
180	5.30	33.74	179	26.67	140.4	4.10	3.25	1473.
190	5.24	33.76	189	26.69	138.3	4.24	3.51	1473.
200	5.11	33.78	199	26.72	135.5	4.38	3.78	1473.
210	5.01	33.78	209	26.73	134.4	4.51	4.06	1473.
220	4.87	33.78	218	26.75	133.0	4.65	4.35	1472.
230	4.80	33.78	228	26.75	132.3	4.78	4.66	1472.
240	4.67	33.79	238	26.77	130.4	4.91	4.97	1472.
250	4.56	33.79	248	26.79	129.0	5.04	5.30	1472.
260	4.51	33.80	258	26.80	127.9	5.17	5.63	1472.
270	4.46	33.83	268	26.83	125.6	5.30	5.97	1472.
280	4.42	33.83	278	26.84	124.9	5.42	6.32	1472.
290	4.37	33.84	288	26.85	123.7	5.55	6.68	1472.
300	4.32	33.84	298	26.85	123.2	5.67	7.06	1472.



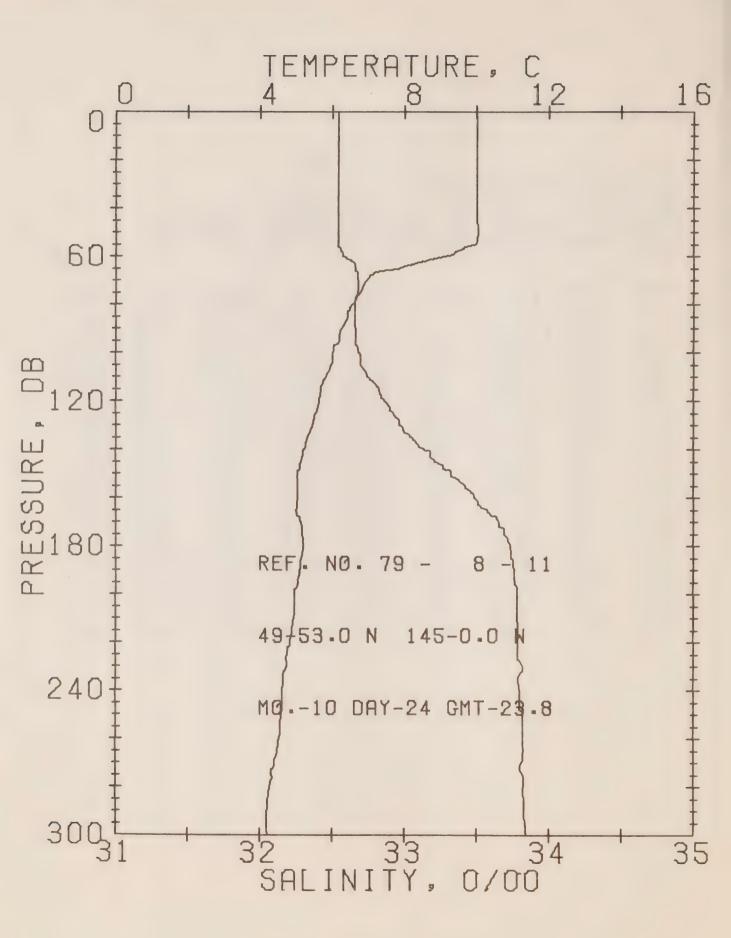
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79-8-10 DATE 24/10/79
POSITION 50-.0N, 145-,0W GMT 17.3 STATION P
RESULTS OF STP CAST 198 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
45	40.04	70 50	^	T		D	EN	
0	10.01	32.52	0	25.04	292.9	•00	• 00	1487.
10	10.01	32.52	10	25.04	293.1	•29	.01	1487.
20	10.00	32.52	20	25.04	293.1	•59	.06	1488.
30	10.00	32.52	30	25.04	293.4	•88	•13	1488.
40 50	9.99	32.52	40 50	25.04	293.8	1.17	•24	1488.
60	7.52	32.52 32.58	60	25.47	293.5 253.0	1.47	• 37	1488 • 1479 •
70	6.48	32.60	70	25.62	238.6	1.74	•53 •69	1475.
80	6.20	32.62	80	25.67	233.5	2.22	.87	1474.
90	5.86	32.65	89	25.74	227.4	2.46	1.07	1473.
100	5.48	32.73	99	25.85	217.1	2.68	1.29	1472.
110	5'•28	32.86	109	25.97	205.2	2.89	1.51	1471.
120	5.10	33.06	119	26.15	188.4	3.08	1.74	1471.
130	4.91	33.23	129	26.31	173.7	3.27	1.97	1470.
140	4'-90	33.34	139	26.39	165.8	3.44	2.21	1471.
150	4.87	33.44	149	26.48	157.7	3.60	2.45	1471.
160	4.95	33.56	159	26.56	149.7	3.75	2.69	1471.
170	4.92	33.64	169	26.63	143.5	3.90	2.94	1472.
180	4.89	33.69	179	26.67	139.5	4.04	3.19	1472.
190	4.82	33.72	189	26.70	136.6	4.18	3.45	1472.
200	4.82	33.74	199	26.72	134.8	4.31	3.72	1472.
210	4.76	33.75	209	26.73	133.9	4.45	4.00	1472.
220	4.64	33.76	218	26.76	131.9	4.58	4.29	1471.
230	4.63	33.78	228	26.77	130.4	4.71	4.59	1472.
240	4.57	33.78	238	26.78	129.9	4.84	4.90	1472.
250	4.44	33.78	248	26.79	128.5	4.97	5.22	1471.
260	4.42	33.80	258	26.81	126.9	5.10	5.56	1471.
270	4.39	33.80	268	26.81	126.7	5.23	5.90	1471.
280	4.37	33.83	278	26.84	124.3	5.35	6.25	1471.
290	4.32	33.83	288	26.85	123.9	5.47	6.61	1471.
300	4.26	33.84	298	26.86	122.7	5.60	6.98	1471.



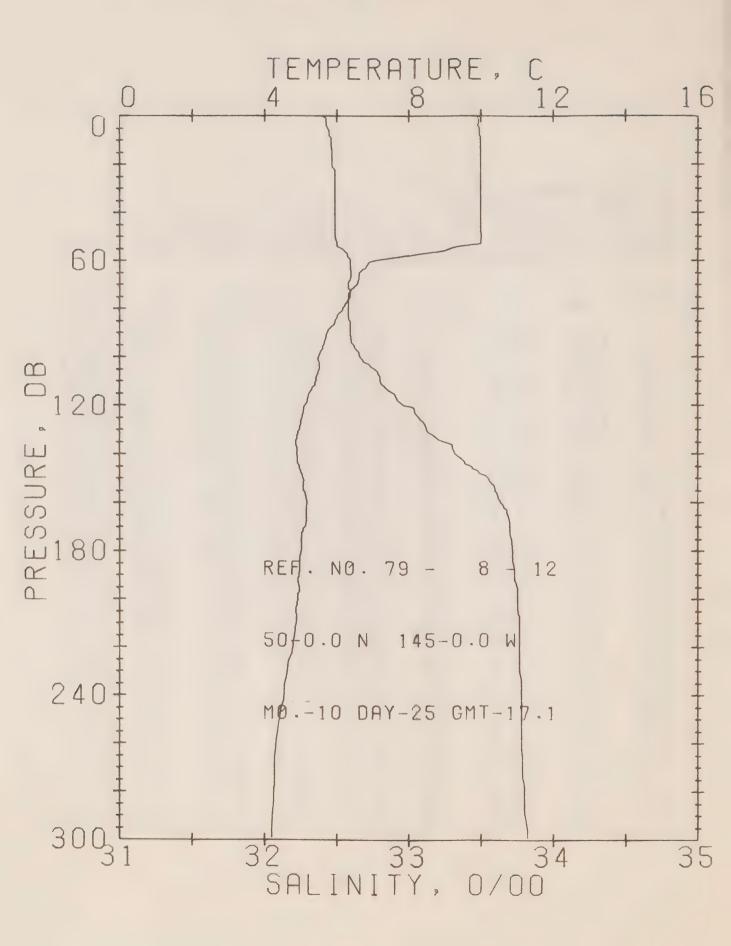
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 10 DATE 24/10/79
POSITION 50- .0N, 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 346 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
Ü	10.01	32.52	0	25.04	292.9	•00	.00	1487.
10	10.01	32.52	10	25.04	293.1	•29	.01	1487.
20	10.00	32.52	20	25.04	293.1	•59	•06	1488.
30	10.00	32.52	30	25.04	293.4	•88	.13	1488.
50	9.99	32.52	50	25.04	293.5	1.47	•37	1488.
75	6.32	32.59	75	25.63	237.2	2.11	.78	1474.
100	5.48	32.73	99	25.85	217.1	2.68	1.29	1472.
125	5.06	33.09	124	26.18	185.4	3.18	1.86	1471.
150	4.87	33.44	149	26.48	157.7	3.60	2.45	1471.
175	4.90	33.65	174	26.64	142.3	3.97	3.06	1472.
200	4.82	33.74	199	26.72	134.8	4.31	3.72	1472.
225	4.62	33.77	223	20.77	131.0	4.65	4.44	1471.
250	4.44	33.78	248	26.79	128.5	4.97	5.22	1471.
300	4:26	33.84	298	26.86	122.7	5.60	6.98	1471.
400	4.02	33.94	397	26.96	113.6	6.78	11.19	1472.
500	3.85	34.04	496	27.06	104.8	7.87	16.18	1473.
600	3.64	34.12	595	27.15	97.5	8.88	21.83	1474.
800	3.27	34.24	793	27.28	86.0	10.71	34.84	1476.
1000	2.94	34.31	990	27.36	78.9	12.36	49.95	1478.
1200	2.68	34.37	1188	27.44	72.3	13.86	66.81	1480.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 11 DATE 24/10/79
POSITION 49-53.0N, 145- .OW GMT 23.8 STATION P
RESULTS OF STP CAST 192 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
	4.01.00	70 F#	0	T	004 3	D	EN	4.4.0.00
0	10.00	32.54	0	25.06	291.3	•00	•00	1487.
10	10.02	32.54	10	25.05	291.9	•29	.01	1487.
20	10.04	32.54	20	25.05	292.3	•58	• 06	1488.
30	10.04	32.54	30	25.05	292.5	•88	•13	1488.
40	10.04	32.54	40	25.05	292.7	1.17	•24	1488.
50 60	10.05	32.54 32.57	50 60	25.05 25.23	293.0 276.0	1.46 1.75	•37 •53	1488 • 1485 •
70	6.94	32.68	70	25.62	238.3	2.00	.70	1477.
80	6.55	32.65	80	25.65	235.5	2.24	.88	1475.
90	6.26	32.65	89	25.69	231.7	2.47	1.08	1474.
100	6.00	32.68	99	25.75	226.9	2.70	1.31	1474.
110	5.80	32.74	109	25.82	220.1	2.93	1.55	1473.
120	5.62	32.86	119	25.93	209.2	3.14	1.80	1473.
130	5.43	32.97	129	26.04	198.9	3.34	2.06	1472.
140	5.19	33.13	139	26.20	184.3	3.54	2.32	1472.
150	5.03	33.32	149	26.36	168.4	3.71	2.58	1471.
160	5.03	33.49	159	26.50	155.8	3.87	2.84	1472.
170	5.15	33.65	169	26.61	145.3	4.02	3.09	1473.
180	5.20	33.73	179	26.67	140.0	4.17	3.34	1473.
190	5.09	33.76	189	26.71	136.6	4.31	3.60	1473.
200	4.97	33.78	199	26.74	133.9	4.44	3.87	1473.
210	4.93	33.78	209	26.74	133.6	4.57	4.15	1473.
220	4.82	33.79	218	26.76	131.7	4.71	4.44	1472.
230	4.75	33.82	228	26.79	128.7	4.84	4.74	1472.
240	4.62	33.80	238	26.79	129.1	4.97	5.05	1472.
250	4.58	33.82	248	26.81	127.1	5.10	5.37	1472.
260	4.52	33.82	258	26.82	126.6	5.22	5.70	1472.
270	4.41	33.81	268	26.82	126.2	5.35	6.04	1471.
280	4.27	33.83	278	26.85	123.6	5.47	6.39	1471.
290	4.19	33.83	288	26.86	122.5	5.60	6.75	1471.
300	4.21	33.84	298	26.87	122.1	5.72	7.12	1471.



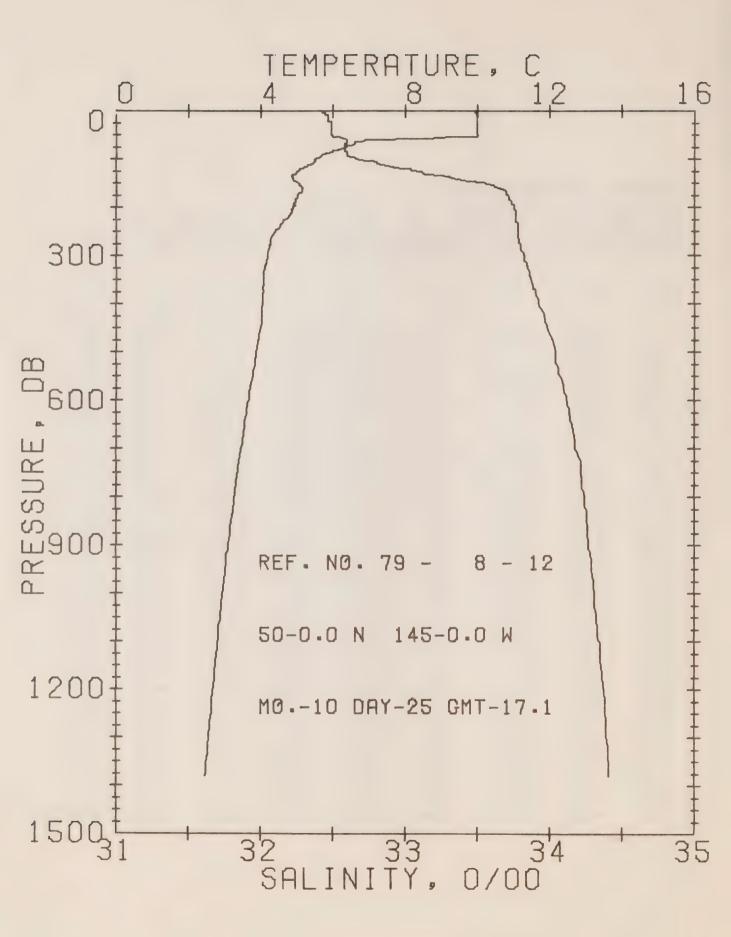
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 12 DATE 25/10/79

POSITION 50- .0N, 145- .0W GMT 17.1 STATION P

RESULTS OF STP CAST 194 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
0	9.95	32.40	0	24.96	300.9	•00	• 0 0	1487.
10	10.00	32.46	10	25.00	297.3	• 30	•02	1487.
20	10.00	32.47	20	25.00	296.8	•60	.06	1487.
30	10.01	32.49	30	25.02	295.7	•89	.14	1488.
40	10.01	32.49	40	25.02	295.9	1.19	•24	1488.
50	10.02	32.49	50	25.01	296.2	1.48	• 38	1488.
60	7.07	32.59	60	25.54	246.4	1.76	•53	1477.
70	6.56	32.58	70	25.60	240.8	2.00	•69	1475.
80	6.16	32.58	80	25.65	236.0	2.24	•87	1474.
90	5.74	32.59	89	25.71	230.4	2.47	1.08	1472.
100	5.50	32.66	99	25.79	222.6	2.70	1.30	1472.
110	5.41	32.80	109	25.91	211.2	2.92	1.53	1472.
120	5.13	32.96	119	26.07	196.2	3.12	1.77	1471.
130	4.95	33.12	129	26.22	182.3	3.31	2.00	1470.
140	4.89	33.32	139	26.38	166.8	3.48	2.24	1471.
150	5.06	33.55	149	26.54	151.6	3.64	2.48	1472.
160	5.16	33.64	159	26.60	146.1	3.79	2.71	1472.
170	5.13	33.70	169	26.65	141.3	3.93	2.95	1473.
180	5.00	33.72	179	26.68	138.5	4.07	3.20	1472.
190	4.94	33.73	189	26.70	137.2	4.21	3.46	1472.
200	4.92	33.75	199	26.72	135.6	4.34	3.73	1472.
210	4.87	33.77	209	26.74	133.6	4.48	4.01	1472.
220	4.77	33.77	218	26.75	132.6	4.61	4.30	1472.
230	4.62	33.77	228	26.77	131.1	4.74	4.61	1472.
240	4.53	33.78	238	26.78	129.4	4.87	4.92	1471.
250	4,39	33.78	248	26.80	128.0	5.00	5.24	1471.
260	4.31	33.78	258	26.81	127.2	5.13	5.57	1471.
270	4.28	33.79	268	26.82	126.3	5.26	5.91	1471.
280	4.25	33.80	278	26.83	125.3	5.38	6.27	1471.
290	4.22	33.80	288	26.84	124.8	5.51	6.63	1471.
300	4.20	33.82	298	26.85	123.4	5.63	7.00	1471.



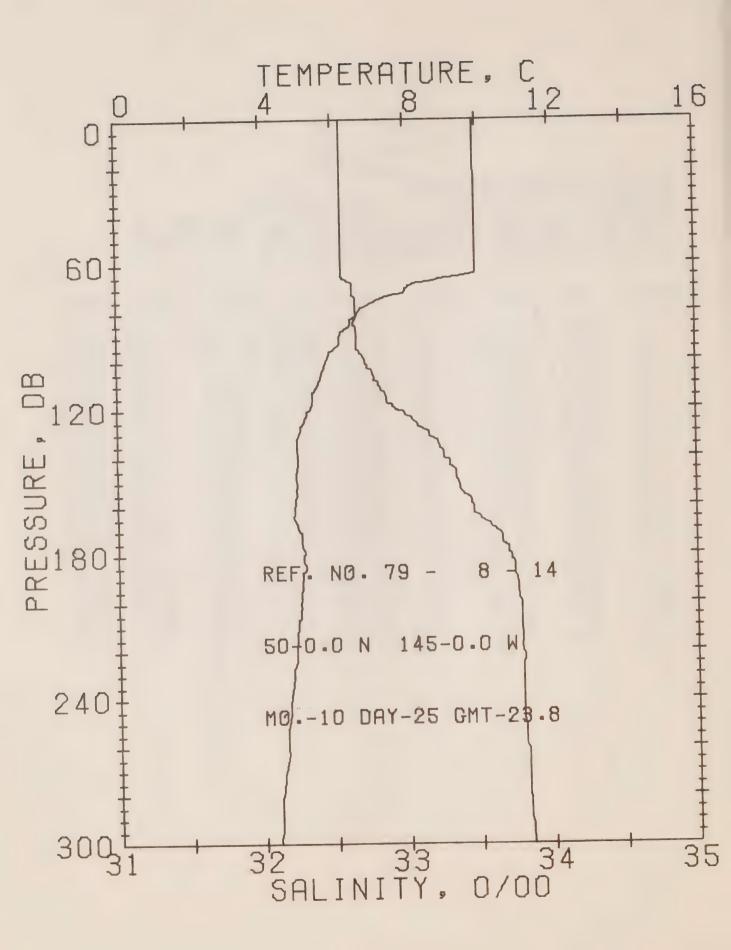
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 12 DATE 25/10/79

POSITION 50- .0N, 145- .0W GMT 17.1 STATION P

RESULTS OF STP CAST 316 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	9.95	32.40	0	24.96	300.9	•00	.00	1487.
10	10.00	32.46	10	25.00	297.3	•30	•02	1487.
20	10.00	32.47	20	25.00	296.8	•60	.06	1487.
30	10.01	32.49	30	25.02	295.7	•89	•14	1488.
50	10.02	32.49	50	25.01	296.2	1.48	•38	1488.
75	6.32	32.59	75	25.63	237.2	2.12	•78	1474.
100	5.50	32.66	99	25.79	222.6	2.70	1.30	1472.
125	5.02	33.07	124	26.16	187.2	3.21	1.88	1471.
150	5.06	33.55	149	26.54	151.6	3.64	2.48	1472.
175	5.01	33.71	174	26.68	139.3	4.00	3.08	1472.
200	4.92	33.75	199	26.72	135.6	4.34	3.73	1472.
225	4.68	33.77	223	26.76	131.7	4.68	4.45	1472.
250	4.39	33.78	248	26.80	128.0	5.00	5.24	1471.
300	4.20	33.82	298	26.85	123.4	5.63	7.00	1471.
400	4.04	33.92	397	26.95	115.1	6.82	11.23	1472.
500	3.88	34.04	496	27.06	105.3	7.92	16.27	1473.
600	3.66	34.11	595	27.14	98.2	8.94	21.99	1474.
800	3.26	34.24	793	27.28	86.1	10.78	35.06	1476.
1000	2.94	34.31	990	27.36	78.8	12.43	50.17	1478.
1200	2.69	34.37	1188	27.44	72.3	13.94	67.11	1480.



OFFSHORE OCEANOGRAPHY GROUP

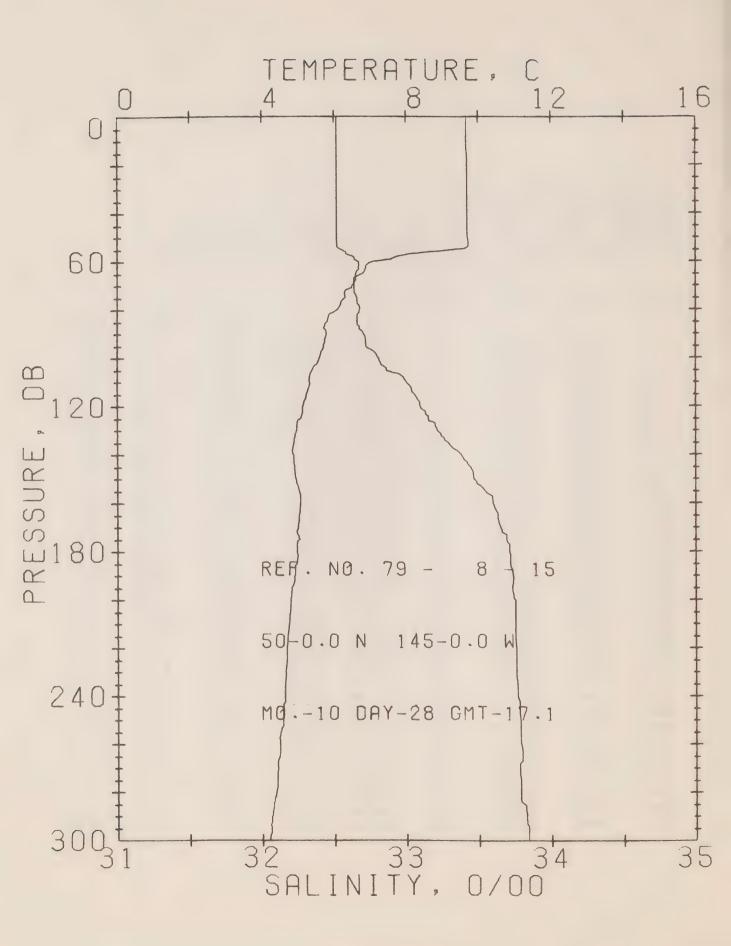
REFERENCE NO. 79- 8- 14 DATE 25/10/79

POSITION 50- .0N, 145- .0W GMT 23.8 STATION P

RESULTS OF STP CAST 201 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
Ú	9.94	32.56	0	25.08	288.9	•00	•00	1487.
10	9.95	32.56	10	25.08	289.2	•29	.01	1487.
20	9.95	32.56	20	25.08	289.4	•58	.06	1487.
30	9.97	32.56	30	25.08	289.8	•87	•13	1488.
40	9.97	32.56	40	25.08	290.1	1.16	.24	1488.
50	9.97	32.56	50	25.08	290.3	1.45	• 37	1488.
60	9.97	32.56	60	25.08	290.5	1.74	•53	1488.
70	8.03	32.63	70	25.43	256.5	2.02	.72	1481.
80	6.67	32.65	80	25.64	237.1	2.26	•90	1476.
. 90	6.17	32.66	89	25.71	230.3	2.50	1.11	1474.
100	5.79	32.71	99	25.79	222.2	2.72	1.33	1473.
110	5,55	32.81	109	25.90	212.0	2.94	1.56	1472.
120	5.34	32.93	119	26.02	200.8	3.15	1.80	1472.
130	5.00	33.15	129	26.23	180.6	3.34	2.04	1471.
140	4.98	33.26	139	26.32	172.3	3.51	2.28	1471.
150	4.95	33.36	149	26.41	164.6	3.68	2.53	1471.
160	4.87	33.46	159	26.49	156.3	3.84	2.78	1471.
170	5.01	33.62	169	26.60	146.0	3.99	3.04	1472.
180	5.13	33.71	179	26.66	140.7	4.13	3.29	1473.
190	5.10	33.75	189	26.70	137.5	4.27	3.56	1473.
200	5.01	33.78	199	26.73	134.3	4.41	3.83	1473.
210	4.93	33.78	209	26.74	133.5	4.54	4.11	1473.
220	4.87	33.79	218	26.75	132.2	4.68	4.40	1472.
230	4.80	33.79	228	26.76	131.5	4.81	4.70	1472.
240	4.71	33.79	238	26.77	130.7	4.94	5.01	1472.
250	4.66	33.80	248	26.78	129.7	5.07	5.34	1472.
260	4.61	33.81	258	26.80	128.0	5.20	5.67	1472.
270	4.53	33.82	268	26.82	126.7	5.33	6.02	1472.
280	4.46	33.82	278	26.82	126.1	5.45	6.37	1472.
290	4.42	33.83	288	26.84	124.8	5.58	6.74	1472.
300	4.41	33.85	298	26.85	123.5	5.70	7.11	1472.



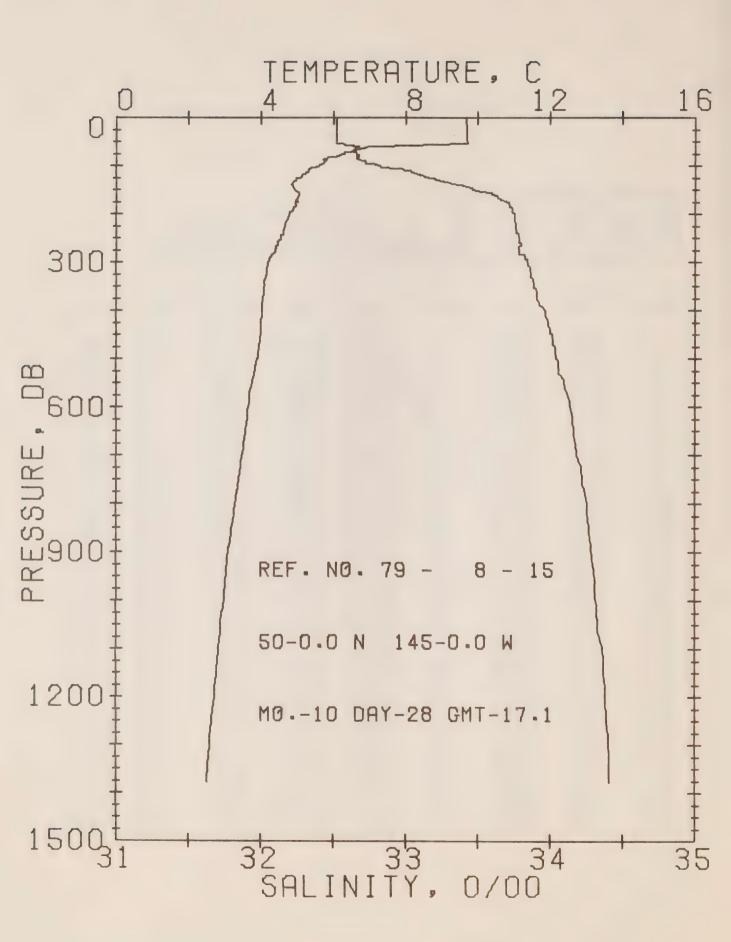
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 15 DATE 28/10/79

POSITION 50- .0N, 145- .0W GMT 17.1 STATION P

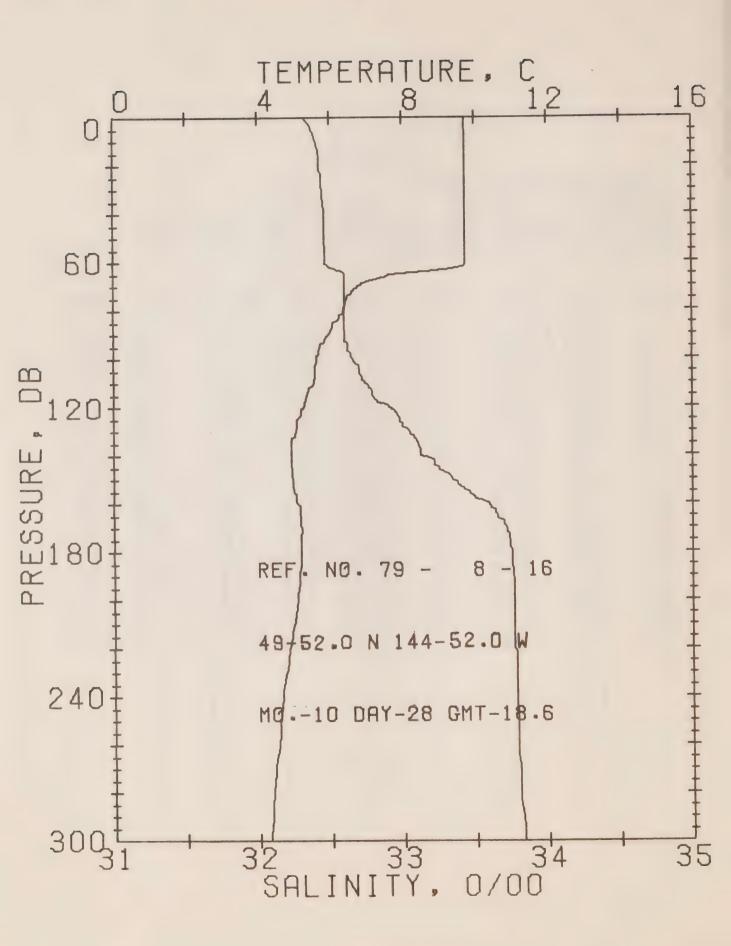
RESULTS OF STP CAST 201 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
U	9.67	32.52	0	25.10	287.6	•00	•00	1486.
10	9'.69	32.52	10	25.09	288.1	•29	.01	1486.
20	9.71	32.52	20	25.09	288.5	•58	•06	1486.
30	9.71	32.52	30	25.09	288 • 8	•86	•13	1487.
40	9.71	32.52	40	25.09	289.0	1.15	.24	1487.
50	9.72	32.52	50	25.09	289.2	1.44	•37	1487.
60	7.08	32.67	60	25.60	240.5	1.72	•52	1477.
70	0.51	32.64	70	25.65	235.7	1.95	•68	1475.
80	6.12	32.68	80	25.73	228.1	2.19	.86	1474.
90	5.78	32.70	89	25.79	222.7	2.41	1.05	1473.
100	5.60	32.81	99	25.90	212.5	2.63	1.26	1472.
110	5.32	33.00	109	26.08	195.2	2.83	1.48	1471.
120	5.14	33.09	119	26.17	186.2	3.02	1.70	1471.
130	4.96	33.21	129	26.29	175.7	3.21	1.93	1471.
140	4.86	33.38	139	26.43	162.0	3.37	2.17	1471.
150	4.93	33.47	149	26.49	156.1	3.53	2.40	1471.
160	5.07	33.60	159	26.58	148.0	3.68	2.64	1472.
170	4.99	33.65	169	26.63	143.5	3.83	2.88	1472.
180	4.96	33.71	179	26.68	138.8	3.97	3.13	1472.
190	4.90	33.74	189	26.71	136.0	4.11	3.39	1472.
200	4.78	33.75	199	26.73	134.0	4.24	3.66	1472.
210	4.73	33.75	209	26.74	133.6	4.38	3.94	1472.
220	4.68	33.76	218	26.75	132.4	4.51	4.23	1472.
230	4.64	33.76	228	26.76	132.0	4.64	4.54	1472.
240	4.60	33.77	238	26.77	130.9	4.77	4.85	1472.
250	4.57	33.79	248	26.79	129.2	4.90	5.18	1472.
260	4.47	33.79	258	26.80	128.1	5.03	5.51	1471.
270	4.42	33.78	268	26.80	128.5	5.16	5.86	1471.
280	4.37	33.79	278	26.81	127.3	5.29	6.21	1471.
290	4.26	33.83	288	26.85	123.2	5.41	6.58	1471.
300	4.18	33.84	298	26.87	121.7	5.54	6.95	1471.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 15 DATE 28/10/79
POSITION: 50- .0N, 145- .0W GMT 17.1 STATION P
RESULTS OF STP CAST 334 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
	- 1 - m			T		D	EN	
0	9.67	32.52	0	25.10	287.6	•00	• 0 0	1486.
10	9.69	32.52	10	25.09	288.1	•29	•01	1486.
20	9.71	32.52	20	25.09	288.5	•58	• 06	1486.
30	9.71	32.52	30	25.09	288.8	•86	•13	1487.
50	9.72	32.52	50	25.09	289.2	1.44	•37	1487.
<b>7</b> 5	6.31	32.66	75	25.69	231.8	2.07	•76	1474.
100	5.60	32.81	99	25.90	212.5	2.63	1.26	1472.
125	5.08	33.15	124	26.22	181.5	3.12	1.82	1471.
150	4.93	33.47	149	26.49	156.1	3.53	2.40	1471.
175	5'-03	33.69	174	26.66	141.0	3.90	3.01	1472.
200	4.78	33.75	199	26.73	134.0	4.24	3.66	1472.
225	4.66	33.76	223	26.75	132.2	4.58	4.38	1472.
250	4.57	33.79	248	26.79	129.2	4.90	5.18	1472.
300	4.18	33.84	298	26.87	121.7	5.54	6.95	1471.
400	4.03	33.96	397	26.98	112.0	6.71	11.13	1472.
500	3.90	34.04	496	27.06	105.3	7.79	16.10	1473.
600	3.65	34.13	595	27.15	96.7	8.80	21.74	1474.
800	3.28	34.25	793	27.28	85.6	10.63	34.76	1476.
1000	2.97	34.31	990	27.36	78.7			
						12.27	49.72	1478.
1200	2.71	34.38	1188	27.44	72.0	13.76	66.49	1480.



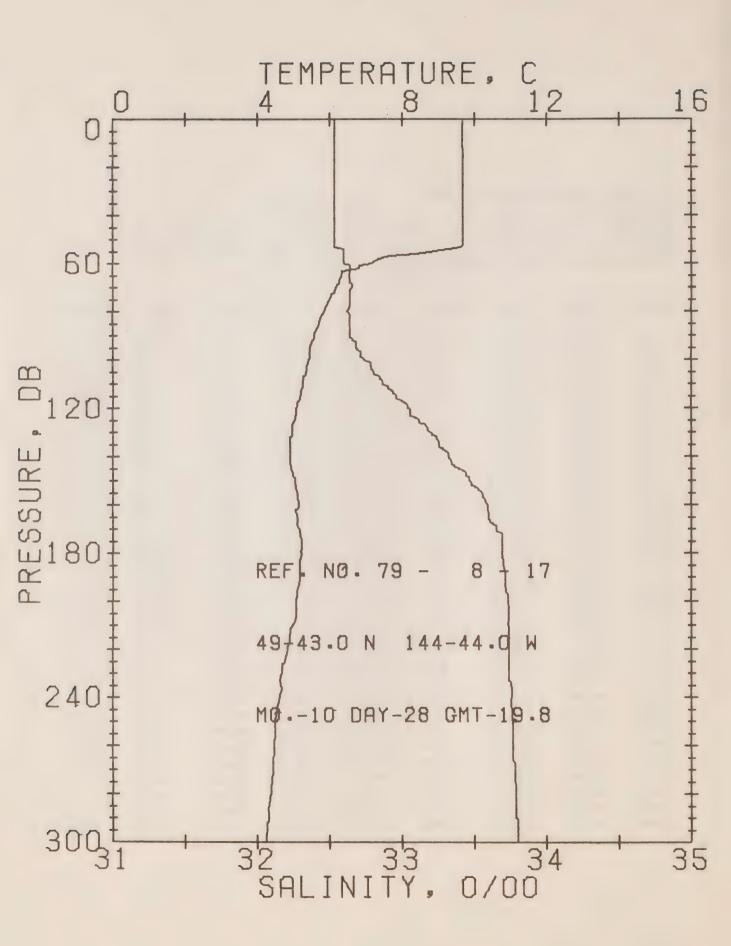
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79-8-16 DATE 28/10/79

POSITION 49-52.0N, 144-52.0W GMT 18.6 STATION E3

RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
, , , , ,				T		D	EN	
0	9.73	32.32	0	24.93	303.3	•00	•00	1486.
10	9.75	32.40	10	24.99	297.9	•30	.02	1486.
20	9.76	32.43	20	25.01	296.0	•60	.06	1487.
30	9.76	32.44	30	25.02	295.1	•89	•14	1487.
40	9.77	32.46	40	25.03	294.3	1.19	.24	1487.
50	9.77	32.46	50	25.03	294.5	1.48	•38	1487.
60	9.75	32.47	60	25.04	293.7	1.78	•54	1487.
70	6.78	32.60	70	25.58	242.0	2.04	.72	1476.
80	6.36	32.60	80	25.63	237.3	2.28	•90	1475.
90	5.95	32.60	89	25.69	232.1	2.51	1.10	1473.
100	5.63	32.65	99	25.77	224.7	2.74	1.32	1472.
110	5.55	32.74	109	25.85	217.2	2.96	1.56	1472.
120	5.24	32.91	119	26.02	201.1	3.17	1.81	1471.
130	5.03	33.04	129	26.14	189.2	3.37	2.05	1471.
140	4.90	33.12	139	26.22	181.9	3.55	2.31	1470.
150	4.96	33.35	149	26.40	165.4	3.72	2.56	1471.
160	5.10	33.59	159	26.57	149.1	3.88	2.81	1472.
170	5.19	33.71	169	26.65	141.3	4.03	3.06	1473.
180	5.17	33.75	179	26.69	138.2	4.17	3.30	1473.
190	5.13	33.76	189	26.70	136.8	4.30	3.56	1473.
200	5.06	33.77	199	26.72	135.6	4.44	3.83	1473.
210	4.95	33.77	209	26.73	134.5	4.58	4.12	1473.
220	4.84	33.77	218	26.74	133.4	4.71	4.41	1472.
230	4.75	33.78	228	26.76	131.7	4.84	4.71	1472.
240	4.63	33.78	238	26.77	130.5	4.97	5.03	1472.
250	4.57	33.79	248	26.79	129.2	5.10	5.35	1472.
260	4.53	33.79	258	26.79	128.9	5.23	5.69 6.03	1472.
270	4.42	33.80	268	26.81	127.0	5.36		1471.
280	4.37	33.80	278 288	26.82 26.84	126.6	5.49 5.61	6.39 6.75	1471.
290	4.34 4.28	33.82	298	26.85	124.9	5.74	7.13	1471.
300	4.20	33.83	270	20.00	150.0	3014	1.10	TALTO



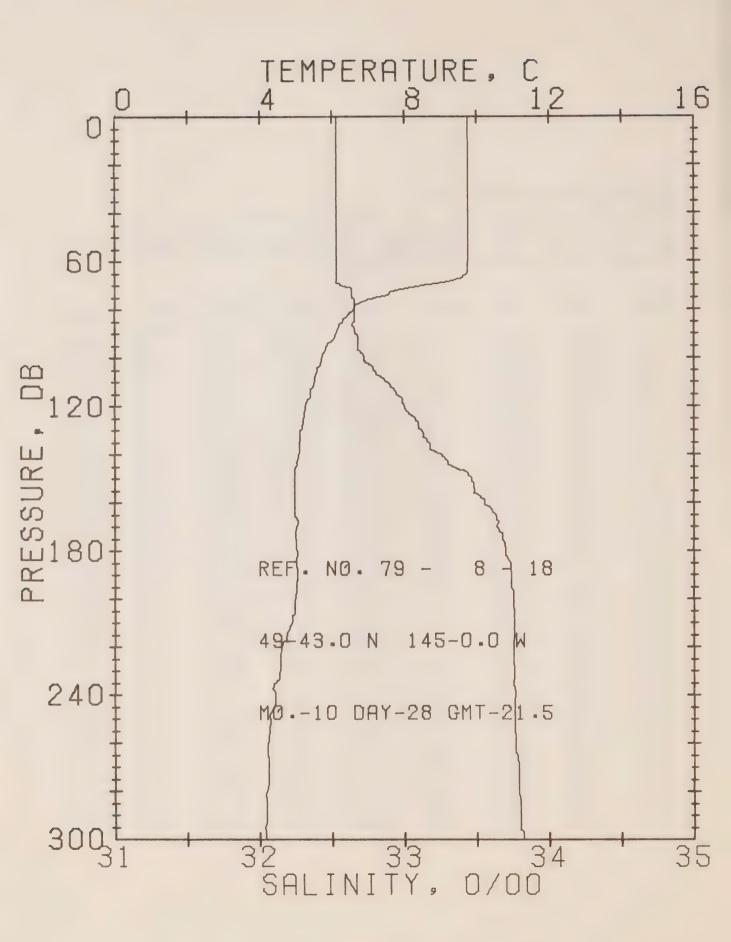
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 17 DATE 28/10/79

POSITION 49-43.0N, 144-44.0W GMT 19.8 STATION E4

RESULTS OF STP CAST 203 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.69	32.53	0	25.10	287.2	•00	•00	1486.
10	9.69	32.53	10	25.10	287.4	•29	.01	1486.
20	9.70	32.53	20	25.10	287.7	•57	.06	1486.
30	9.70	32.53	30	25.10	287.9	•86	.13	1487.
40	9.71	32.53	40	25.10	288.2	1.15	•23	1487.
50	9.70	32.53	50	25.10	288.2	1.44	•37	1487.
60	7.12	32.60	60	25.54	246.3	1.71	•52	1477.
70	6.15	32.65	70	25.70	230.6	1.94	•67	1474.
80	5,83	32.62	80	25.72	229.1	2.17	•85	1473.
90	5.57	32.64	89	25.77	224.8	2.40	1.04	1472.
100	5.41	32.73	99	25.86	216.3	2.62	1.26	1471.
110	5.25	32.87	109	25.98	204.1	2.83	1.48	1471.
120	5.08	33.04	119	26.14	189.6	3.03	1.71	1471.
130	4.97	33.19	129	26.27	176.9	3.21	1.95	1471.
140	4.92	33.32	139	26.38	167.1	3.38	2.18	1471.
150	5.04	33.47	149	26.48	157.3	3.54	2.42	1472.
160	5.14	33.59	159	26.56	149.9	3.70	2.66	1472.
170	5.16	33.65	169	26.61	145.4	3.84	2.91	1473.
180	5.22	33.69	179	26.64	143.2	3.99	3.17	1473.
190	5.18	33.71	189	26.66	141.4	4.13	3.44	1473.
200	5.08	33.73	199	26.68	138.9	4.27	3.71	1473.
210	4.96	33.73	209	26.70	137.6	4.41	4.00	1473.
220	4.83	33.74	218	26.72	135.5	4.54	4.30	1472.
230	4.67	33.74	228	26.74	133.8	4.68	4.61	1472.
240	4.61	33.76	238	26.76	132.0	4.81	4.93	1472.
250	4.49	33.76	248	26.78	130.2	4.94	5.26	1471.
260	4.46	33.77	258	26.78	129.6	5.07	5.59	1471.
270	4.42	33.78	268	26.80	128.5	5.20	5.94	1471.
280	4.36	33.79	278	26.81	127.2	5.33	6.30	1471.
290	4.32	33.79	288	26.81	126.9	5.46	6.67	1471.
300	4.23	33.80	298	26.83	125.3	5.58	7.05	1471.



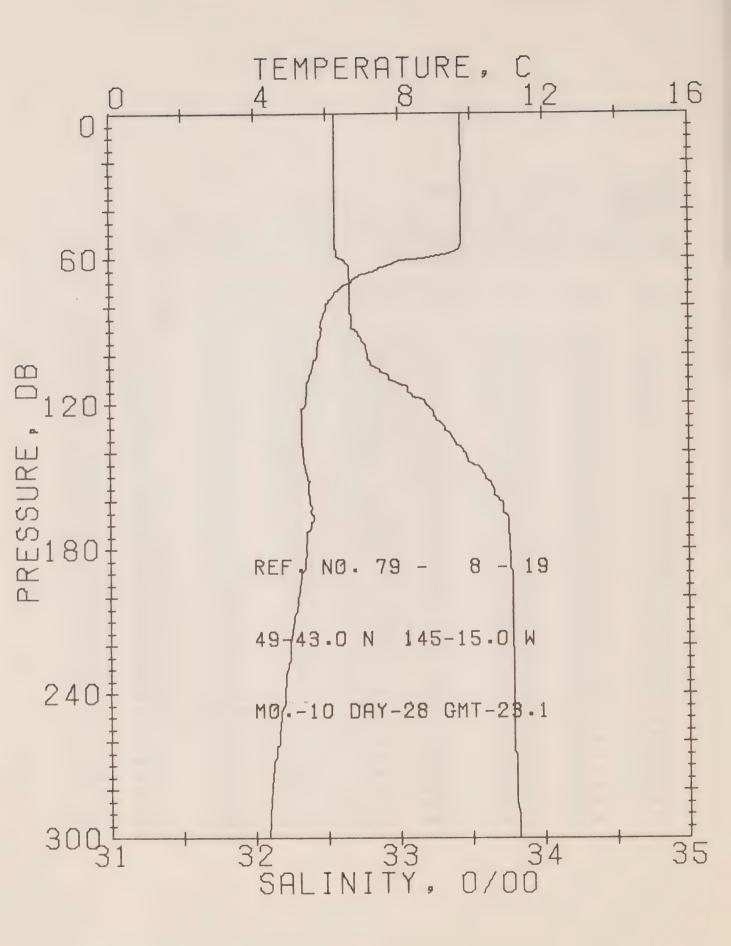
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 18 DATE 28/10/79

POSITION 49-42.0N, 145- .0W GMT 21.5 STATION CI

RESULTS OF STP CAST 209 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.76	32.53	0	25.09	288.3	•00	•00	1486.
10	9.78	32.53	10	25.09	288.7	•29	.01	1487.
20	9.78	32.53	20	25.09	288.9	•58	• 06	1487.
30	9.78	32.53	30	25.09	289.1	.87	•13	1487.
40	9.79	32.53	40	25.08	289.5	1.16	.24	1487.
50	9.79	32.53	50	25.08	289.6	1.45	• 37	1487.
60	9.77	32.53	60	25.09	289.6	1.73	• 53	1487.
70	8.47	32.56	70	25.31	267.9	2.02	.72	1483.
80	6.58	32.65	80	25.65	235.9	2.27	•91	1476.
90	6.12	32.66	89	25.72	229.7	2.50	1.11	1474.
100	5.71	32.72	99	25.81	220.5	2.72	1.33	1473.
110	5.50	32.88	109	25.96	206.2	2.94	1.56	1472.
120	5.25	33.00	119	26.09	194.5	3.14	1.79	1471.
130	5.13	33.12	129	26.20	184.3	3.33	2.03	1471.
140	5.08	33.26	139	26.31	173.4	3.51	2.28	1471.
150	4'.96	33.47	149	26.49	156.4	3.67	2.53	1471.
160	4.95	33.55	159	26.56	150.4	3.83	2.77	1471.
170	5.00	33.64	169	26.62	144.4	3.97	3.01	1472.
180	5.04	33.70	179	26.66	140.4	4.12	3.27	1472.
190	5.04	33.74	189	26.70	137.6	4.25	3.53	1473.
200	4.98	33.75	199	26.71	136.2	4.39	3.80	1473.
210	4.87	33.76	209	26.73	134.4	4.53	4.08	1472.
220	4.59	33.75	218	26.75	132.1	4.66	4.38	1471.
230	4.55	33.76	228	26.77	131.0	4.79	4.68	1471.
240	4.42	33.77	238	26.79	129.0	4.92	4.99	1471.
250	4.30	33.76	248	26.79	128.6	5.05	5.31	1471.
260	4.21	33.77	258	26.81	126.9	5.18	5.64	1470.
270	4.24	33.79	268	26.82	125.8	5.31	5.99	1471.
280	4.19	33.79	278	26.83	125.4	5.43	6.34	1471.
290	4.20	33.80	288	26.83	124.9	5.56	6.70	1471.
300	4.15	33.82	298	26.86	122.9	5.68	7.07	1471.



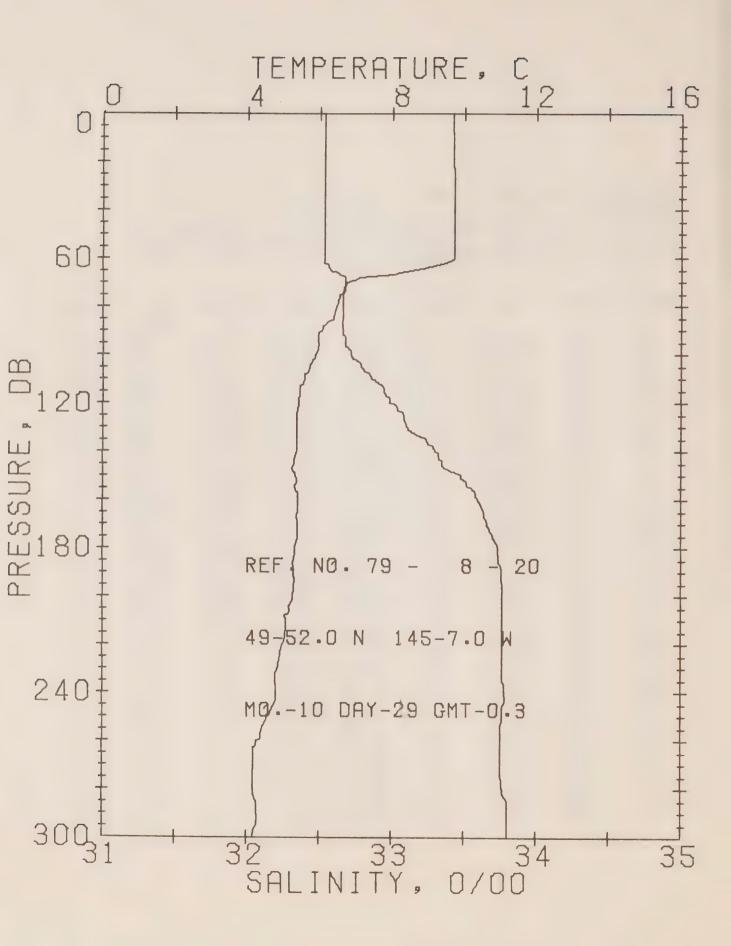
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 19 DATE 28/10/79

POSITION 49-43.0N, 145-15.0W GMT 23.1 STATION W4

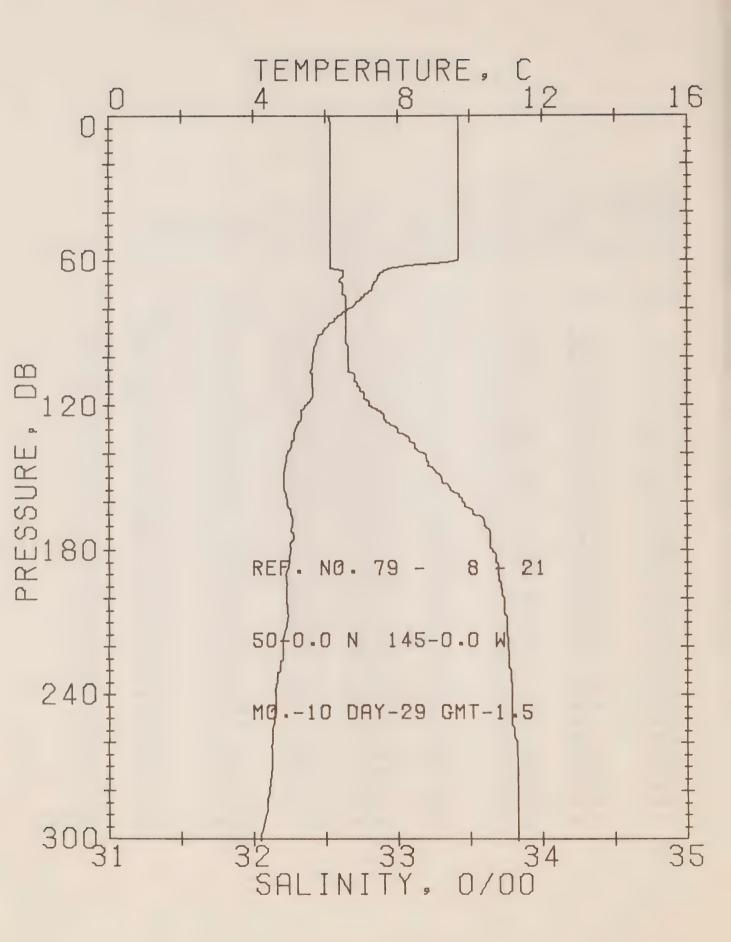
RESULTS OF STP CAST 196 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.73	32.56	0	25.12	285.6	•00	.00	1486.
10	9.74	32.56	10	25.11	285.9	•29	•01	1486.
20 30	9°•74 9°•75	32.56	20	25.11	286.1	•57	•06	1487.
40	9.74	32.56 32.56	30 40	25.11 25.11	286.4	•86	•13	1487.
50	9.73	32.56	50	25.12	286.5	1.14	•23 •36	1487. 1487.
60	8.69	32.59	60	25.30	268.7	1.71	•52	1483.
70	6,68	32.66	70	25.64	236.3	1.96	•69	1476.
80	5.99	32.66	80	25.73	228.0	2.19	.86	1473.
90	5.85	32.70	89	25.78	223.5	2.42	1.06	1473.
100	5.73	32.78	99	25.86	216.2	2.64	1.27	1473.
110	5.50	32.93	109	26.00	202.5	2.85	1.50	1472.
120	5.41	33.18	119	26.21	182.9	3.04	1.72	1472.
130	5.31	33.32	129	26.33	171.4	3.22	1.95	1472.
140	5.34	33.45	139	20.43	162.1	3.38	2.17	1473.
150	5.46	33.59	149	26.53	153.1	3.54	2.41	1473.
160	5,53	33.69	159	26.60	146.6	3.69	2.64	1474.
170	5.58	33.75	169	26.64	142.8	3.83	2.89	1474.
180	5.41	33.76	179	26.67	140.2	3.97	3.14	1474.
190	5.29	33.78	189	26.70	137.4	4.11	3.40	1474.
200	5.18	33.78	199	26.71	136.3	4.25	3.67	1473.
210	5.06	33.78	209	26.72	135.0	4.39	3.96	1473.
220	4.96	33.78	218	26.74	133.8	4.52	4.25	1473.
230	4 • 88	33.79	228	26.75	132.4	4.65	4.56	1473.
240	4.79	33.79	238	26.76	131.5	4.79	4.87	1472.
250	4.69	33.79	248	26.77	130.5	4.92	5.20	1472.
260 2 <b>7</b> 0	4.64	33.79 33.80	258 268	26.78	130.1	5.05	5.54	1472.
280	4.42			26.81	127.6	5.18	5.89	1472.
290	4.38	33.80 33.82	278 288	26.81	127.2	5.30	6.24	1472.
300	4.35	33.82	298	26.83	125.5	5.43	6.61	1472.
300	4.33	33.02	270	20.03	125.0	5.56	6.99	1472.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 20 DATE 29/10/79
POSITION 49-52.0N, 145- 7.0W GMT .3 STATION W3
RESULTS OF STP CAST 195 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	9.68	32.53	0	T 25.10	207 0	D	EN	11106
10	9.70	32.53	10	25.10	287.0	•00	•00	1486.
20	9.71	32.53	20	25.10	287.5	• 29	•01 •06	1486 • 1486 •
30	9.72	32.53	30	25.09	288.3	•58 •86	•13	1487.
40	9.73	32.53	40	25.09	288.5	1.15	•13	1487.
50	9.73	32.53	50	25.09	288.7	1.44	•23	1487.
60	9.72	32.53	60	25.09	288.7	1.73	•53	1487.
70	6.75	32.67	70	25.64	236.4	1.99	.70	1476.
80	6.45	32.66	80	25.67	233.6	2.23	•88	1475.
90	6.04	32.66	89	25.72	228.7	2.46	1.08	1474.
100	5.88	32.71	99	25.78	223.2	2.69	1.30	1473.
110	5.58	32.86	109	25.94	208.6	2.90	1.53	1472.
120	5.41	32.99	119	26.06	197.1	3.10	1.77	1472.
130	5.36	33.10	129	26.15	188.4	3.30	2.01	1472.
140	5.35	33.30	139	26.31	173.4	3.48	2.26	1472.
150	5.34	33.48	149	26.46	160.0	3.64	2.51	1473.
160	5.38	33.59	159	26.54	152.3	3.80	2.76	1473.
170	5.38	33.66	169	26.59	147.2	3.95	3.01	1474.
180	5.32	33.73	179	26.66	141.4	4.09	3.27	1474.
190	5.29	33.76	189	26.68	138.9	4.23	3.53	1474.
200	5.25	33.77	199	26.70	137.8	4.37	3.81	1474.
210	5.07	33.77	209	26.72	135.8	4.51	4.09	1473.
220	4.95	33.77	218	26.73	134.6	4.65	4.39	1473.
230	4.84	33.77	228	26.74	133.5	4.78	4.70	1472.
240	4.79	33.78	238	26.76	132.3	4.91	5.01	1472.
250	4.55	33.77	248	26.77	130.5	5.04	5.34	1472.
260	4.27	33.75	258	26.79	129.1	5.17	5.68	1471.
270	4.18	33.75	268	26.80	128.2	5.30	6.03	1470.
280	4.18	33.76	278	26.81	127.1	5.43	6.39	1470.
290	4.28	33.80	288	26.83	125.7	5.56	6.75	1471.
300	4.16	33.80	298	26.84	124.5	5.68	7.13	1471.



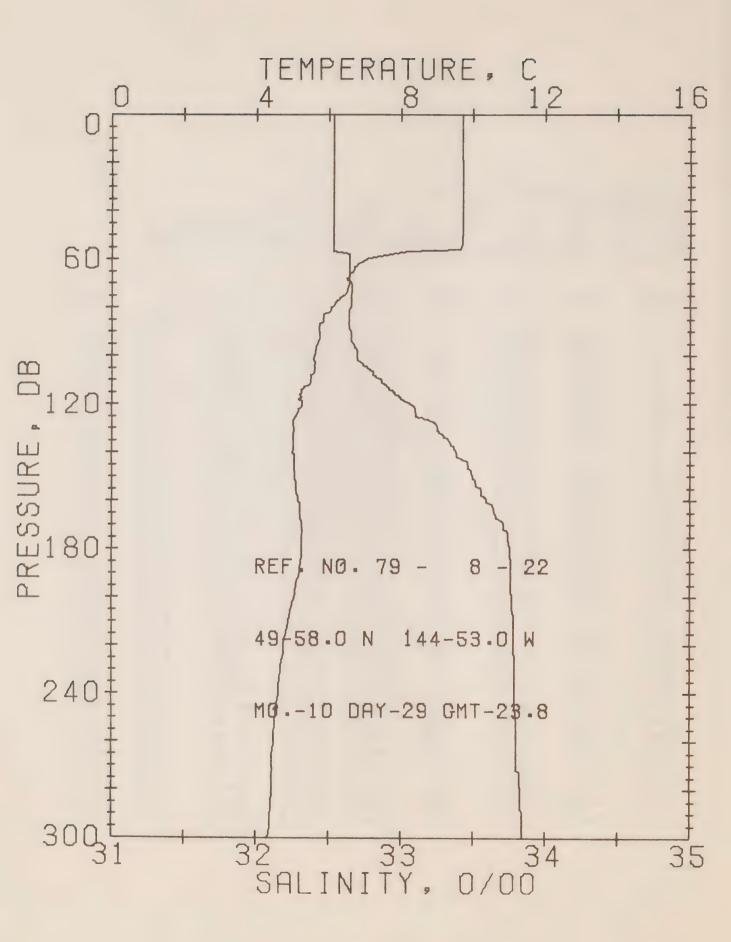
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 21 DATE 29/10/79

POSITION 50- .0N, 145- .0W GMT 1.5 STATION P

RESULTS OF STP CAST 199 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
	0.60	70 50	0		003.0	D	EN	1400
0	9.69 9.70	32.52 32.53	0 10	25.09	287.9	•00	.00	1486.
10				25.10	287.5	•29	•01	1486.
20	9.71	32.53	20 30	25.10	287.8	•58	•06	1486.
30	9.71 9.71	32.53 32.53		25.10	288.0	•86	•13	1487.
40 50	9.71	32.53	40 50	25.10 25.10	288 • 1 288 • 2	1.15	•23 •37	1487. 1487.
60	9.70		60	25.10				1487.
		32.53	70		288.3	1.73	•53	
70	7.30	32.62 32.64		25.53	247.3	1.99	•70	1478 · 1476 ·
80	6.61 5.92	32.64	80 89	25.64	237.1	2.23	•88 1•09	1473.
90	5.65	32.65	99	25.72 25.76	225.0	2.69	1.30	1472.
100 110	5.63	32.70	109	25.81	221.2	2.91	1.54	1472.
120	5.45	32.80	119	25.91	211.7	3.13	1.80	1472.
130	5.14	33.00	129	26.10	193.4	3.33	2.06	1471.
140	4.94	33.18	139	26.26	177.8	3.52	2.31	1471.
150	4.82	33.30	149	26.37	167.6	3.69	2.57	1470.
160	4.94	33.45	159	26.48	157.8	3.85	2.82	1471.
170	5.07	33.60	169	26.58	148.1	4.00	3.08	1472.
180	5.01	33.65	179	26.63	143.8	4.15	3.34	1472.
190	4.89	33.69	189	26.67	139.6	4.29	3.61	1472.
200	4,92	33.73	199	26.70	137.1	4.43	3.88	1472.
210	4.92	33.75	209	26.72	135.7	4.57	4.17	1472.
220	4.80	33.76	218	26.74	133.7	4.70	4.46	1472.
230	4.73	33.78	228	26.76	131.5	4.83	4.77	1472.
240	4.61	33.79	238	26.78	129.5	4.96	5.08	1472.
250	4.55	33.79	248	26.79	129.0	5.09	5.40	1472.
260	4.51	33.82	258	26.82	126.4	5.22	5.73	1472.
270	4.50	33.83	268	26.83	125.6	5.35	6.08	1472.
280	4.43	33.83	278	26.83	125.0	5.47	6.43	1472.
290	4.33	33.83	288	26.85	123.9	5.60	6.79	1471.
300	4.19	33.83	298	26.86	122.5	5.72	7.16	1471.



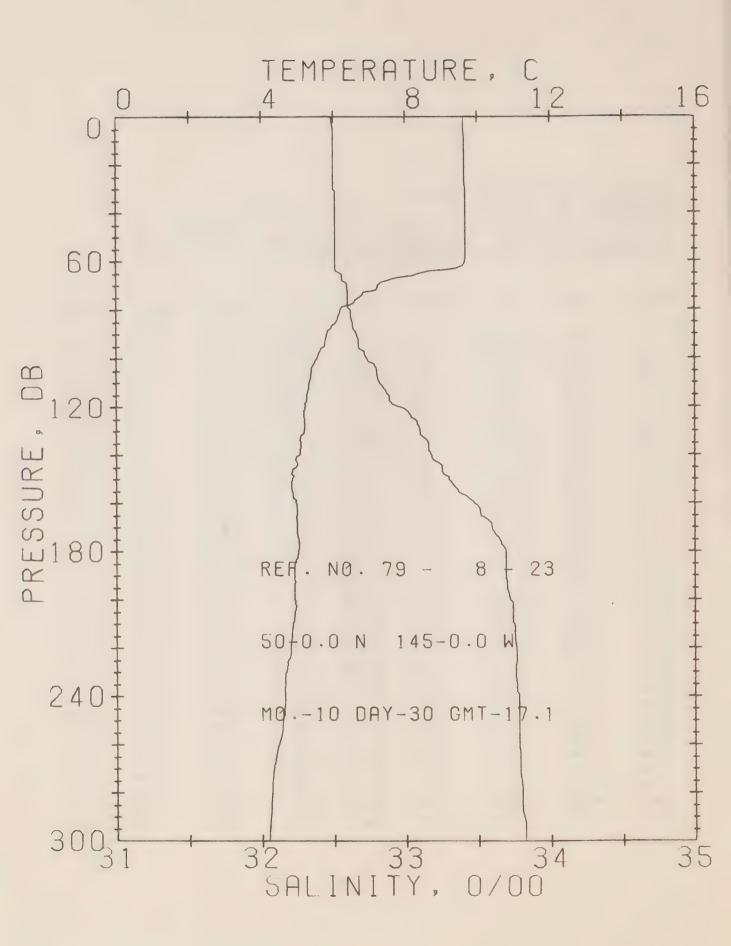
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 22 DATE 29/10/79

POSITION 49-58.0N, 144-53.0W GMT 23.8 STATION P

RESULTS OF STP CAST 187 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.71	32.53	0	25.10	287.5	•00	.00	1486.
10	9.71	32.53	10	25.10	287.7	•29	.01	1486.
20	9.72	32.53	20	25.09	288.0	•58	.06	1487.
30	9.72	32.53	30	25.09	288.2	•86	.13	1487.
40	9.73	32.53	40	25.09	288.5	1.15	•23	1487.
50	9.73	32.53	50	25.09	288.7	1.44	• 37	1487.
60	7.03	32.64	60	25.58	242.1	1.72	•52	1477.
70	6.55	32.65	70	25.65	235.4	1.95	•68	1475.
80	6.09	32.65	80	25.71	230.0	2.19	•86	1474.
90	5.75	32.64	89	25.75	226.4	2.41	1.05	1472.
100	5.60	32.69	99	25.80	221.5	2.64	1.27	1472.
110	5.50	32.86	109	25.95	207.7	2.85	1.50	1472.
120	5.25	33.06	119	26.13	190.0	3.05	1.74	1471.
130	5.03	33.25	129	26.31	173.5	3.24	1.97	1471.
140	4.99	33.38	139	26.42	163.4	3.40	2.20	1471.
150	5.07	33.49	149	26.50	155.8	3.56	2.43	1472.
160	5.15	33.59	159	26.56	149.7	3.72	2.68	1472.
<b>17</b> 0	5.26	33.71	169	26.65	142.1	3.86	2.92	1473.
180	5.24	33.75	179	26.68	139.0	4.00	3.17	1473.
190	5.18	33.76	189	26.70	137.6	4.14	3.43	1473.
200	5.05	33.77	199	26.72	135.5	4.28	3.70	1473.
210	4.88	33.78	209	26.75	133.0	4.41	3.98	1472.
220	4.76	33.78	218	26.76	131.7	4.54	4.27	1472.
230	4.67	33.79	228	26.78	130.1	4.68	4.57	1472.
240	4.60	33.79	238	26.78	129.4	4.80	4.89	1472.
250	4.52	33.80	248	26.80	128.2	4.93	5.21	1471.
260	4.48	33.80	258	26.81	127.6	5.06	5.54	1471.
270	4.42	33.80	268	26.81	127.0	5.19	5.88	1471.
280	4.44	33.83	278	26.83	125.1	5.31	6.24	1472.
290	4.38	33.84	288	26.85	123.8	5.44	6.60	1472.
300	4.29	33.84	298	26.86	122.9	5.56	6.97	1471.



OFFSHORE OCEANOGRAPHY GROUP

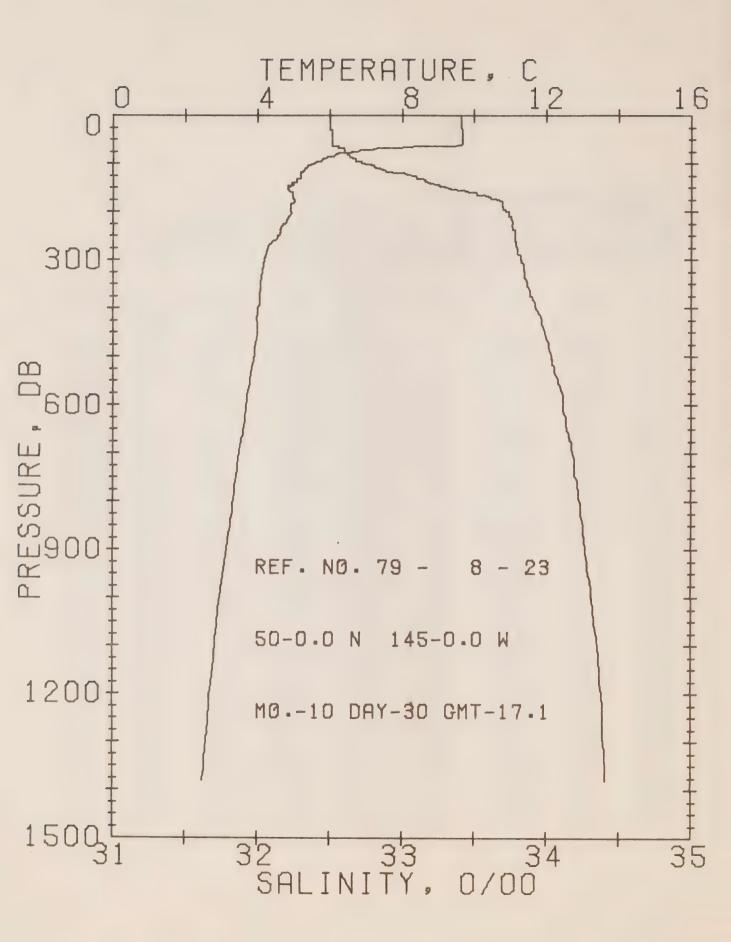
REFERENCE NO. 79- 8- 23 DATE 30/10/79

POSITION 50- .ON, 145- .OW GMT 17.1 STATION P

RESULTS OF STP CAST 194 POINTS TAKEN FROM ANALOG TRACE

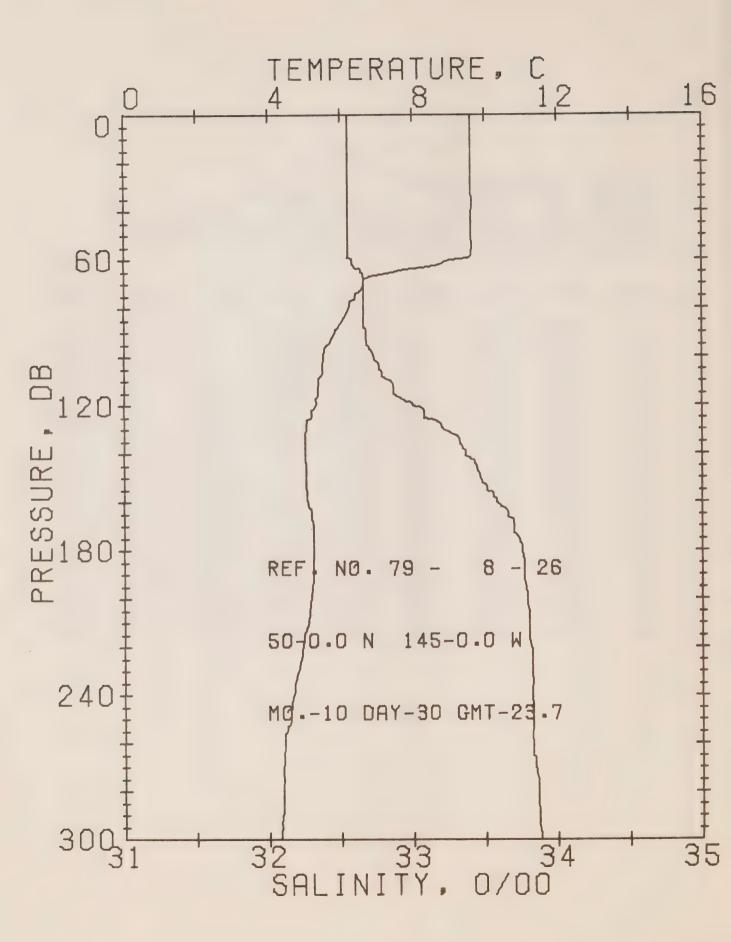
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	9'.64	32.49	0	25.08	289.4	•00	•00	1486.
10	9.65	32.50	10	25.08	289.0	•29	.01	1486.
20	9.66	32.50	20	25.08	289.3	•58	.06	1486.
30	9.67	32.50	30	25.08	289.6	.87	.13	1486.
40	9.67	32.51	40	25.09	289.1	1.16	.24	1487.
50	9.67	32.51	50	25.09	289.3	1.45	•37	1487.
60	9.66	32.51	60	25.09	289.4	1.73	•53	1487.
70	7.22	32.59	70	25.52	248.5	2.00	.71	1478.
80	6.20	32.62	80	25.67	233.5	2.25	.89	1474.
90	5.81	32.66	89	25.75	226.0	2.48	1.09	1473.
100	5.54	32.73	99	25.84	217.8	2.70	1.31	1472.
110	5.34	32.82	109	25.93	208.9	2.91	1.54	1471.
120	5,22	32.97	119	26.07	196.4	3.12	1.77	1471.
130	5.18	33.10	129	26.17	186.4	3.31	2.02	1471.
140	5.06	33.18	139	26.25	179.1	3.49	2.27	1471.
150	4.85	33.30	149	26.37	168.0	3.66	2.52	1471.
160	4.97	33.48	159	26.50	155.9	3.82	2.78	1471.
170	4.99	33.60	169	26.59	147.5	3.97	3.03	1472.
180	5.01	33.69	179	26.66	140.8	4.12	3.29	1472.
190	4.92	33.69	189	26.67	139.9	4.26	3.56	1472.
200	4.90	33.72	199	26.70	137.6	4.40	3.83	1472.
210	4.86	33.75	209	26.72	135.0	4.53	4.12	1472.
220	4.80	33.77	218	26.74	133.2	4.67	4.41	1472.
230	4.66	33.76	228	26.75	132.2	4.80	4.71	1472.
240	- 4.64	33.78	238	26.77	130.6	4.93	5.03	1472.
250	4.57	33.78	248	26.78	130.0	5.06	5.36	1472.
260	4.45	33.78	258	26.79	128.8	5.19	5.69	1471.
270	4.31	33.79	268	26.82	126.6	5.32	6.04	1471.
280	4.26	33.80	278	26.83	125.4	5.45	6.39	1471.
290	4.22	33.81	288	26.84	124.1	5.57	6.75	1471.
300	4.20	33.82	298	26.85	123.4	5.69	7.12	1471.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 23 DATE 30/10/79
POSITION 50- .ON: 145- .OW GMT 17.1 STATION P
RESULTS OF STP CAST 329 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	9.64	32.49	0	25.08	289.4	•00	•00	1486.
10	9,65	32.50	10	25.08	289.0	•29	.01	1486.
20	9'.66	32.50	20	25.08	289.3	•58	•06	1486.
30	9.67	32.50	30	25.08	289.6	.87	.13	1486.
50	9.67	32.51	50	25.09	289.3	1.45	•37	1487.
<b>7</b> 5	6.70	32.60	75	25.59	241.1	2.13	.80	1476.
100	5.54	32.73	99	25.84	217.8	2.70	1.31	1472.
125	5.20	33.07	124	26.15	188.8	3.21	1.89	1471.
150	4.85	33.30	149	26.37	168.0	3.66	2.52	1471.
175	5.03	33.65	174	26.63	144.0	4.05	3.16	1472.
200	4.90	33.72	199	26.70	137.6	4.40	3.83	1472.
225	4.72	33.77	223	26.76	132.1	4.73	4.56	1472.
250	4.57	33.78	248	26.78	130.0	5.06	5.36	1472.
300	4.20	33.82	298	26.85	123.4	5.69	7.12	1471.
400	4.01	33.93	397	26.96	114.3	6.88	11.36	1472.
500	3.91	34.03	496	27.05	106.3	7.98	16.39	1473.
600	3.69	34.11	595	27.13	98.8	9.00	22.11	1474.
800	3.32	34.23	793	27.26	87.8	10.86	35.33	1476.
1000	2.96	34.31	990	27.36	78.6	12.53	50.58	1478.
1200	2.68	34.38	1188	27.44	71.8	14.03	67.37	1480.



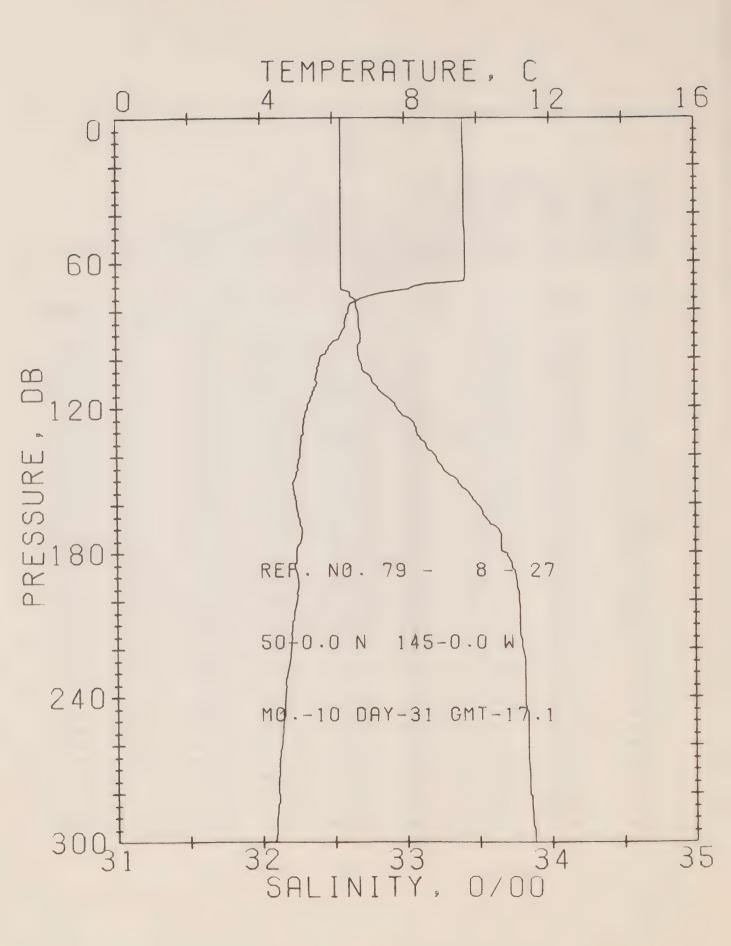
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 26 DATE 30/10/79

POSITION 50- .0N, 145- .0W GMT 23.7 STATION P

RESULTS OF STP CAST 196 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.61	32.55	0	25.13	284.4	• 00	• 0 0	1486.
10	9.62	32.55	10	25.13	284.9	•28	.01	1486.
20	9.64	32.55	20	25.12	285.3	•57	.06	1486.
30	9.64	32.55	30	25.12	285.5	•86	.13	1486.
40	9.64	32.55	40	25.12	285.7	1.14	•23	1487.
50	9.64	32.55	50	25.12	285.8	1.43	• 36	1487.
60	9.02	32.58	60	25.25	274.3	1.71	•52	1485.
70	6.62	32.66	70	25.65	235.6	1.96	•69	1476.
80	6.21	32.66	80	25.70	230.6	2.20	.87	1474.
90	5.85	32.67	89	25.76	225.7	2.42	1.07	1473.
100	5.52	32.72	99	25.84	218.0	2.65	1.28	1472.
110	5.38	32.85	109	25.95	207.1	2.86	1.51	1472.
120	5.31	33.00	119	26.08	195.2	3.06	1.75	1472.
130	5.04	33.21	129	26.28	176.6	3.25	1.98	1471.
140	5.00	33.37	139	26.41	164.3	3.42	2.21	1471.
150	5.04	33.47	149	26.48	157.3	3.58	2.45	1472.
160	5.09	33.58	159	26.56	149.8	3.73	2.69	1472.
170	5.24	33.70	169	26.64	142.6	3.88	2.94	1473.
180	5.26	33.75	179	26.68	139.2	4.02	3.19	1473.
190	5.22	33.77	189	26.70	137.4	4.15	3.45	1473.
200	5'.17	33.79	199	26.72	135.4	4.29	3.72	1473.
210	5.09	33.80	209	26.74	133.8	4.43	4.00	1473.
220	4.92	33.82	218	26.77	130.9	4.56	4.29	1473.
230	4.80	33.82	228	26.79	129.3	4.69	4.59	1472.
240	4.68	33.82	238	26.80	128.1	4.82	4.90	1472.
250	4.58	33.83	248	26.82	126.3	4.94	5.21	1472.
260	4'.42	33.83	258	26.84	124.7	5.07	5.54	1471.
270	4.38	33.84	268	26.85	123.6	5.19	5.88	1471.
280	4.38	33.86	278	26.86	122.2	5.32	6.22	1471.
290	4.35	33.87	288	26.87	121.2	5.44	6.57	1472.
300	4.31	33.88	298	26.89	120.1	5.56	6.94	1472.



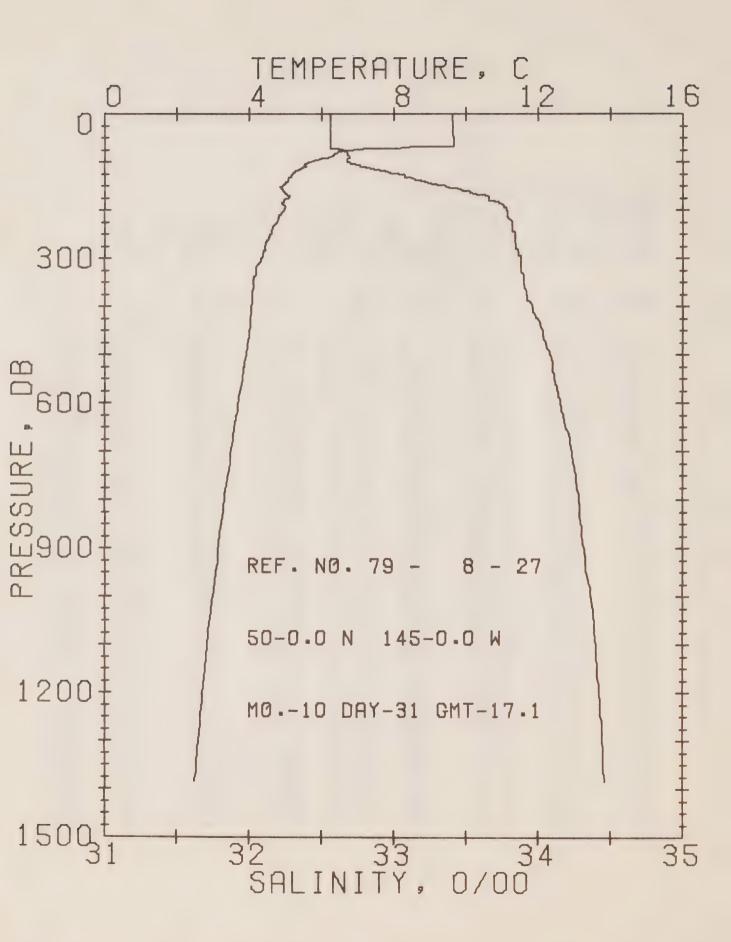
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 27 DATE 31/10/79

POSITION 50- .0N, 145- ,0W GMT 17.1 STATION P

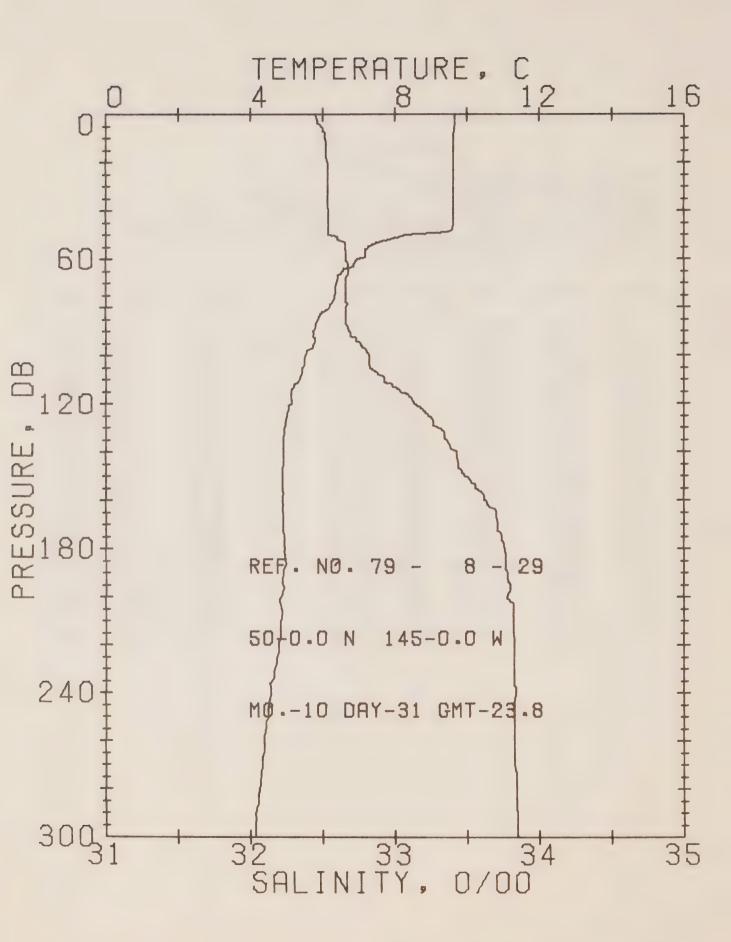
RESULTS OF STP CAST 199 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
0	9.64	32.56	0	25.13	284.2	•00	.00	1486.
10	9.64	32.56	10	25.13	284.4	•28	.01	1486.
20	9.65	32.56	20	25.13	284.7	•57	•06	1486.
30	9.65	32.56	30	25.13	284.9	•85	.13	1486.
40	9.66	32.56	40	25.13	285.2	1.14	•23	1487.
50	9.67	32.56	50	25.13	285.6	1.42	•36	1487.
60	9.67	32.56	60	25.13	285.7	1.71	•52	1487.
70	8.23	32.56	70	25.35	264.5	1.99	•71	1482.
80	6.43	32.67	80	25.68	232.6	2.24	•90	1475.
90	6.21	32.69	89	25.73	228.5	2.47	1.10	1474.
100	5.64	32.68	99	25.79	222.7	2.69	1.31	1472.
110	5.56	32.78	109	25.88	214.4	2.91	1.55	1472.
120	5.28	32.94	119	26.04	199.3	3.12	1.79	1471.
130	5.15	33.08	129	26.16	187.5	3.31	2.03	1471.
140	5.06	33.21	139	26.27	176.9	3.49	2.29	1471.
150	4.92	33.36	149	26.41	164.2	3.66	2.54	1471.
160	4.97	33.50	159	26.51	154.4	3.82	2.79	1471.
170	5.11	33.64	169	26.61	145.6	3.97	3.04	1472.
180	4.96	33.70	179	26.67	139.5	4.12	3.30	1472.
190	4.99	33.76	189	26.72	135.5	4.25	3.56	1472.
200	4.97	33.78	199	26.74	133.9	4.39	3.83	1473.
210	4.83	33.79	209	26.76	131.7	4.52	4.10	1472.
220	4.79	33.80	218	26.77	130.2	4.65	4.39	1472.
230	4.70	33.82	228	26.80	128.2	4.78	4.69	1472.
240	4.63	33.82	238	26.81	127.5	4.91	4.99	1472.
250	4.57	33.84	248	26.83	125.5	5.04	5.31	1472.
260	4.53	33.84	258	26.83	125.1	5.16	5.63	1472.
270	4.46	33.85	268	26.84	124.0	5.29	5.97	1472.
280	4.44	33.85	278	26.85	123.6	5.41	6.32	1472.
290	4.39	33.87	288	26.87	121.7	5.53	6.67	1472.
300	4.33	33.88	298	26.88	120.3	5.65	7.04	1472.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 27 DATE 31/10/79
POSITION 50- .0N, 145- .0W GMT 17.1 STATION P
RESULTS OF STP CAST 332 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	9.64	32.56	Ö	25.13	284.2	•00	•00	1486.
10	9.64	32.56	10	25.13	284.4	•28	.01	1486.
20	9.65	32.56	20	25.13	284.7	•57	•06	1486.
30	9.65	32.56	30	25.13	284.9	•85	•13	1486.
50	9.67	32.56	50	25.13	285.6	1.42	• 36	1487.
75	6.74	32.66	75	25.64	237.1	2.12	.80	1476.
100	5.64	32.68	99	25.79	222.7	2.69	1.31	1472.
125	5.18	33.04	124	26.13	190.8	3.21	1.91	1471.
150	4.92	33.36	149	26.41	164.2	3.66	2.54	1471.
175	5.07	33.66	174	26.63	143.8	4.05	3.17	1472.
200	4.97	33.78	199	26.74	133.9	4.39	3.83	1473.
225	4.76	33.82	223	26.79	128.8	4.72	4.54	1472.
250	4.57	33.84	248	26.83	125.5	5.04	5.31	1472.
300	4.33	33.88	298	26.88	120.3	5.65	7.04	1472.
400	4.05	33.96	397	26.98	112.2	6.82	11.20	1472.
500	3.91	34.08	496	27.09	102.6	7.89	16.12	1473.
600	3.69	34.15	595	27.16	95.8	8.89	21.67	1474.
800	3.30	34.28	793	27.31	83.2	10.67	34.33	1476.
1000	2.99	34.36	990	27.40	75.3	12.26	48.90	1478.
1200	2.70	34.42	1188	27.47	69.0	13.69	64.94	1480.



OFFSHORE OCEANOGRAPHY GROUP

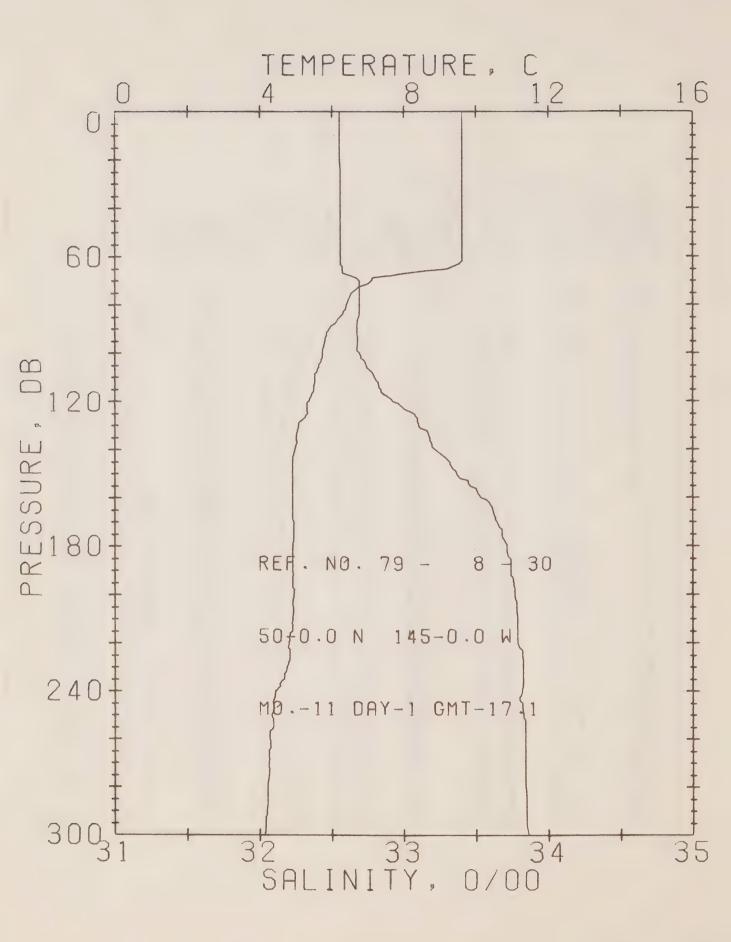
REFERENCE NO. 79- 8- 29 DATE 31/10/79

POSITION 50- .0N, 145- .0W GMT 23.8 STATION P

RESULTS OF STP CAST 216 POINTS TAKEN FROM ANALOG TRACE

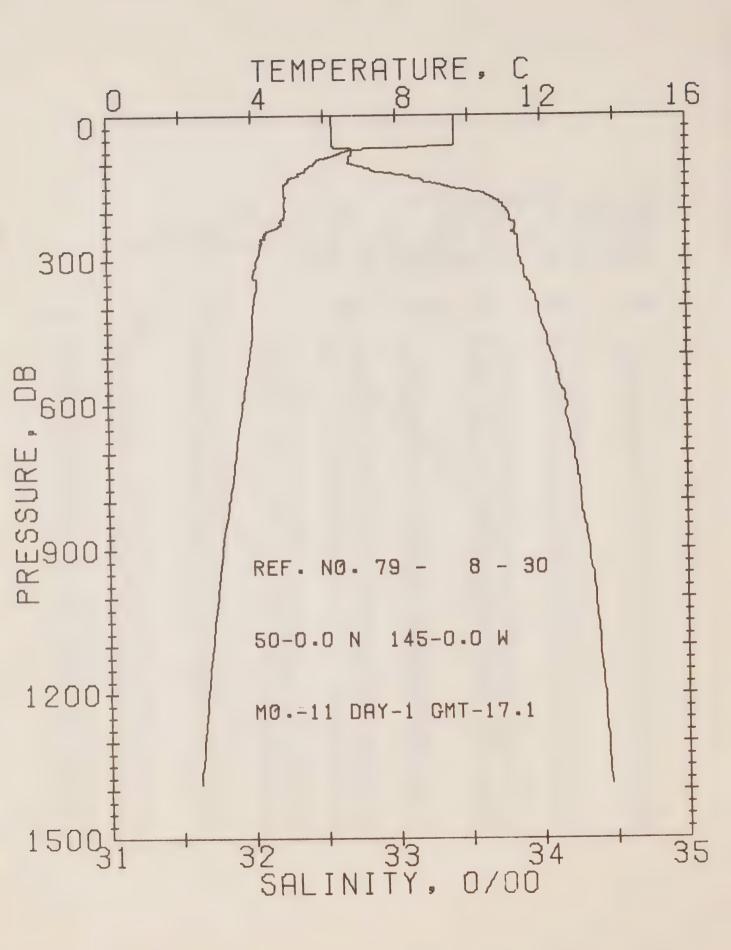
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	9.66	32.45	0	25.04	292.6	•00	•00	1486.
10	9.64	32.51	10	25.09	287.9	•29	.01	1486.
20	9.64	32.53	20	25.11	287.0	•58	•06	1486.
30	9.64	32.53	30	25.11	286.9	•86	.13	1486.
40	9.64	32.54	40	25.11	286.6	1.15	.23	1487.
50	8.27	32.54	50	25.33	266.2	1.44	•36	1482.
60	6.95	32.66	60	25.61	239.6	1.68	•50	1477.
70	6.38	32.66	70	25.68	232.6	1.92	•66	1475.
80	6.18	32.66	80	25.71	230.3	2.15	.84	1474.
90	5.74	32.68	89	25.78	223.7	2.38	1.03	1472.
100	5.52	32.82	99	25.91	210.8	2.60	1.24	1472.
110	5.35	32.93	109	26.02	200.8	2.80	1.47	1471.
120	5.14	33.13	119	26.20	183.6	2.99	1.69	1471.
130	4.93	33.30	129	26.36	168.6	3.17	1.91	1471.
140	4.90	33.43	139	26.47	158.7	3.33	2.14	1471.
150	4.88	33.49	149	26.52	154.1	3.49	2.37	1471.
160	4.89	33.62	159	26.62	144.5	3.64	2.61	1471.
170	4.92	33.71	169	26.69	138.2	3.78	2.84	1472.
180	4.96	33.76	179	26.72	135.1	3.92	3.09	1472.
190	4.92	33.78	189	26.74	133.2	4.05	3.34	1472.
200	4.84	33.79	199	26.75	132.1	4.18	3.60	1472.
210	4.84	33.82	209	26.78	129.5	4.31	3.87	1472.
220	4.78	33.83	218	26.80	128.2	4.44	4.16	1472.
230	4.66	33.83	228	26.81	127.0	4.57	4.45	1472.
240	4.56	33.84	238	26.83	125.3	4.70	4.75	1472.
250	4.48	33.83	248	26.83	125.2	4.82	5.06	1471.
260	4.37	33.83	258	26.84	124.1	4.95	5.39	1471.
270	4.32	33.83	268	26.85	123.7	5.07	5.72	1471.
280	4.24	33.84	278	26.86	122.2	5.19	6.07	1471.
290	4.14	33.85	288	26.88	120.5	5.31	6.42	1471.
300	4.12	33.85	298	26.88	120.4	5.44	6.78	1471.



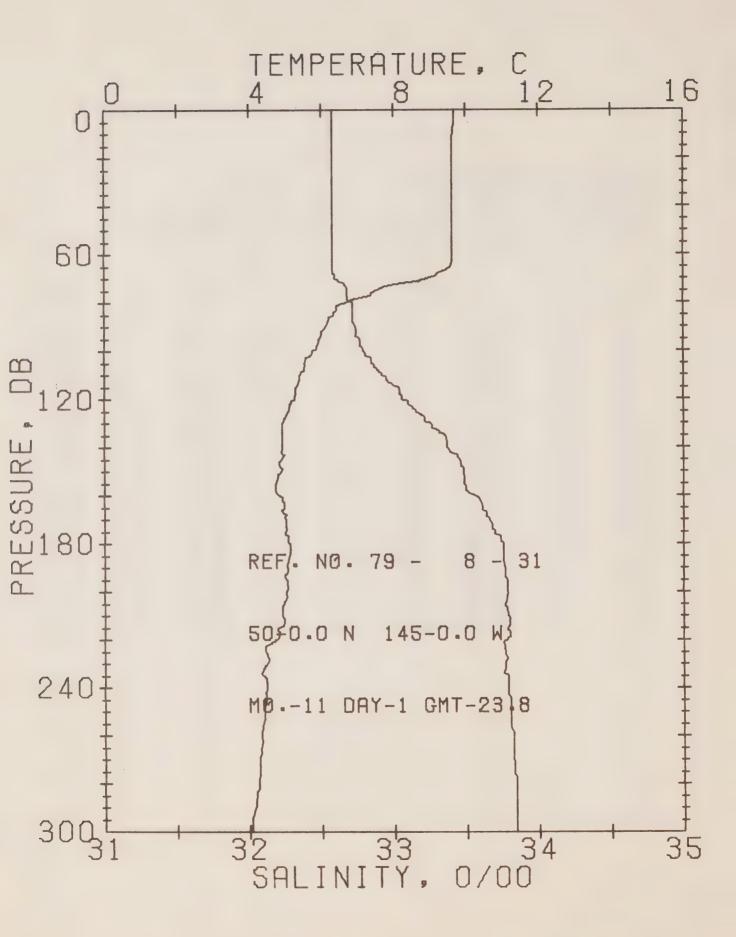
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 30 DATE 1/11/79
POSITION 50- .0N, 145- .0W GMT 17.1 STATION P
RESULTS OF STP CAST 200 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.62	32.55	0	25.13	284.6	•00	• 00	1486.
10	9.64	32.55	10	25.12	285.1	•28	.01	1486.
20	9.63	32.55	20	25.13	285.1	•57	.06	1486.
30	9.64	32.56	30	25.13	284.7	•85	•13	1486.
40	9.64	32.56	40	25.13	284.9	1.14	•23	1487.
50	9.64	32.56	50	25.13	285.1	1.42	• 36	1487.
60	9.64	32.56	60	25.13	285.3	1.71	•52	1487.
70	7.08	32.69	70	25.61	239.2	1.98	•70	1477.
80	6.40	32.69	80	25.70	230.7	2.21	•88	1475.
90	5.91	32.67	89	25.75	226.4	2.44	1.08	1473.
100	5.74	32.69	99	25.78	223.1	2.67	1.30	1473.
110	5.53	32.80	109	25.90	212.5	2.89	1.53	1472.
120	5.37	32.92	119	26.01	201.8	3.09	1.77	1472.
130	5.08	33.10	129	26.19	185.2	3.29	2.02	1471.
140	4.98	33.21	139	26.28	176.0	3.46	2.26	1471.
150	4.91	33.37	149	26.42	163.4	3.63	2.51	1471.
160	4.90	33.53	159	26.55	151.4	3.79	2.76	1471.
170	4.94	33.64	169	26.63	143.6	3.94	3.01	1472.
180	4.91	33.71	179	26.69	138.2	4.08	3.26	1472.
190	4.92	33.74	189	26.71	136.2	4.21	3.51	1472.
200	4.94	33.77	199	26.73	134.3	4.35	3.78	1472.
210	4.91	33.79	209	26.75	132.5	4.48	4.06	1472.
220	4.81	33.79	218	26.76	131.6	4.61	4.35	1472.
230	4.75	33.83	228	26.80	128.0	4.74	4.65	1472.
240	4.44	33.82	238	26.83	125.5	4.87	4.95	1471.
250	4.33	33.83	248	26.84	123.6	4.99	5.26	1471.
260	4.28	33.84	258	26.86	122.5	5.12	5.58	1471.
270	4.25	33.84	268	26.86	122.2	5.24	5.91	1471.
280	4.22	33.84	278	26.87	121.8	5.36	6.26	1471.
290	4.19	33.85	288	26.88	121.0	5.48	6.61	1471.
300	4.13	33.86	298	26.89	119.7	5.60	6.97	1471.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 30 DATE 1/11/79
POSITION 50- .0N, 145- .0W GMT 17.1 STATION P
RESULTS OF STP CAST 362 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	9.62	32.55	0	25.13	284.6	•00	.00	1486.
10	9.64	32.55	10	25.12	285.1	•28	.01	1486.
20	9.63	32.55	20	25.13	285.1	•57	•06	1486.
30	9.64	32.56	30	25.13	284.7	•85	•13	1486.
50	9.64	32.56	50	25.13	285.1	1.42	• 36	1487.
75	6.54	32.69	75	25.69	232.4	2.10	.79	1475.
100	5.74	32.69	99	25.78	223.1	2.67	1.30	1473.
125	5.34	33.07	124	26.13	190.3	3.19	1.90	1472.
150	4.91	33.37	149	26.42	163.4	3.63	2.51	1471.
175	4.93	33.68	174	26.66	140.7	4.01	3.13	1472.
200	4.94	33.77	199	26.73	134.3	4.35	3.78	1472.
225	4.84	33.82	223	26.78	129.7	4.68	4.50	1472.
250	4.33	33.83	248	26.84	123.6	4.99	5.26	1471.
300	4.13	33.86	298	26.89	119.7	5.60	6.97	1471.
400	4.03	33.98	397	27.00	110.5	6.76	11.08	1472.
500	3.92	34.07	496	27.08	103.5	7.83	16.01	1473.
600	3.70	34.17	595	27.18	94.5	8.83	21.57	1474.
800	3.33	34.26	793	27.29	85.2	10.63	34.38	1476.
1000	2.97	34.30	990	27.40	75.3	12.22	48.95	1478.
1200	2.69	34.42	1188	27.47	68.9	13.66	65.10	1480.



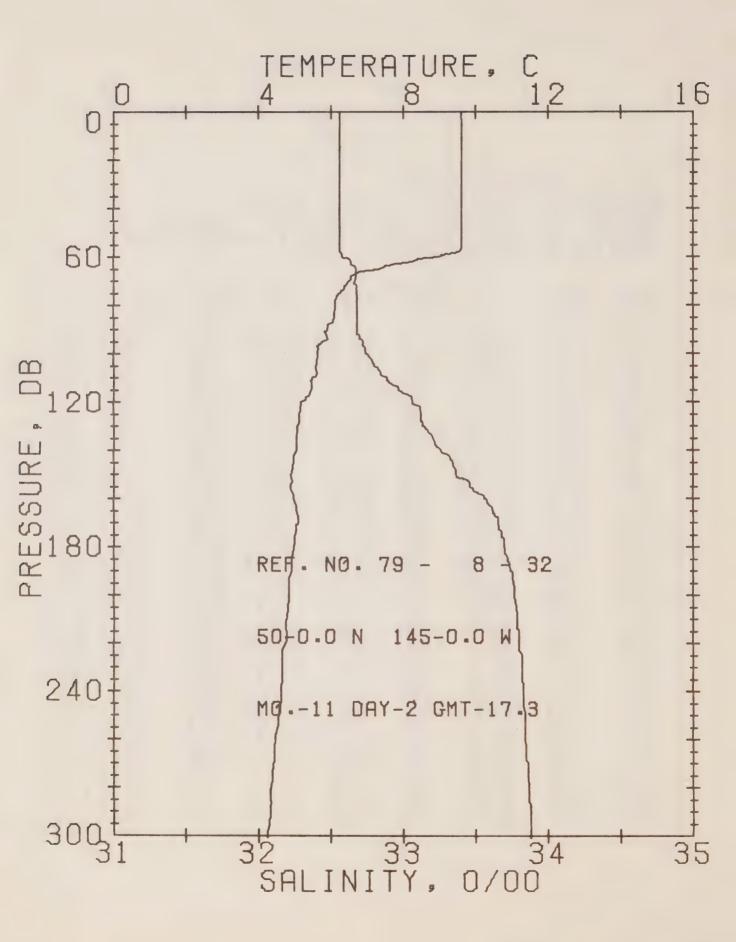
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 31 DATE 1/11/79

POSITION 50- .0N. 145- .0W GMT 23.8 STATION P

RESULTS OF STP CAST 2U2 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		0712		T	347	D	EN	JOOND
0	9.67	32.57	0	25.13	283.9	•00	•00	1486.
10	9.65	32.57	10	25.14	283.8	•28	.01	1486.
20	9.63	32.57	20	25.14	283.6	•57	.06	1486.
30	9.63	32.57	30	25.14	283.8	•85	.13	1486.
40	9.64	32.57	40	25.14	284.2	1.14	.23	1487.
50	9.64	32.57	50	25.14	284.3	1.42	• 36	1487.
60	9.64	32.57	60	25.14	284.5	1.70	•52	1487.
70	8.90	32.59	70	25.27	272.0	1.99	.71	1484.
80	6.66	32.71	80	25.69	232.5	2.23	•90	1476.
90	6.10	32.73	89	25.77	224.2	2.46	1.10	1474.
100	5.76	32.79	99	25.86	215.8	2.68	1.31	1473.
110	5.40	32.92	109	26.01	202.1	2.89	1.53	1472.
120	5.25	33.05	119	26.13	190.8	3.09	1.76	1471.
130	4.91	33.25	129	26.32	172.2	3.27	1.99	1470.
140	4.90	33.37	139	26.42	163.2	3.43	2.22	1471.
150	4.89	33.48	149	26.51	154.9	3.59	2.45	1471.
160	4.82	33.56	159	26.58	148.3	3.74	2.69	1471.
170	5.00	33.66	169	26.64	142.9	3.89	2.94	1472.
180	5.13	33.75	179	26.69	137.7	4.03	3.19	1473.
190	5.06	33.76	189	26.71	135.9	4.17	3.45	1473.
200 210	5.01 4.92	33.78 33.79	199 209	26.73	134.3	4.30	3.72	1473.
220	4.73	33.78	218	26.75 26.76	132.7	4.44	4.00	1472.
230	4.48	33.77	228	26.78	131.4	4.57 4.70	4.28	1472. 1471.
240	4.48	33.79	238	26.80	128.1	4.83	4.58 4.89	1471.
250	4.40	33.80	248	26.81	126.6	4.95	5.21	1471.
260	4.32	33.82	258	26.84	124.4	5.08	5.53	1471.
270	4.26	33.82	268	26.85	123.6	5.20	5.87	1471.
280	4.24	33.84	278	26.86	122.2	5.33	6.21	1471.
290	4.13	33.84	288	26.87	121.2	5.45	6.57	1471.
300	4.04	33.84	298	26.88	120.3	5.57	6.93	1470.



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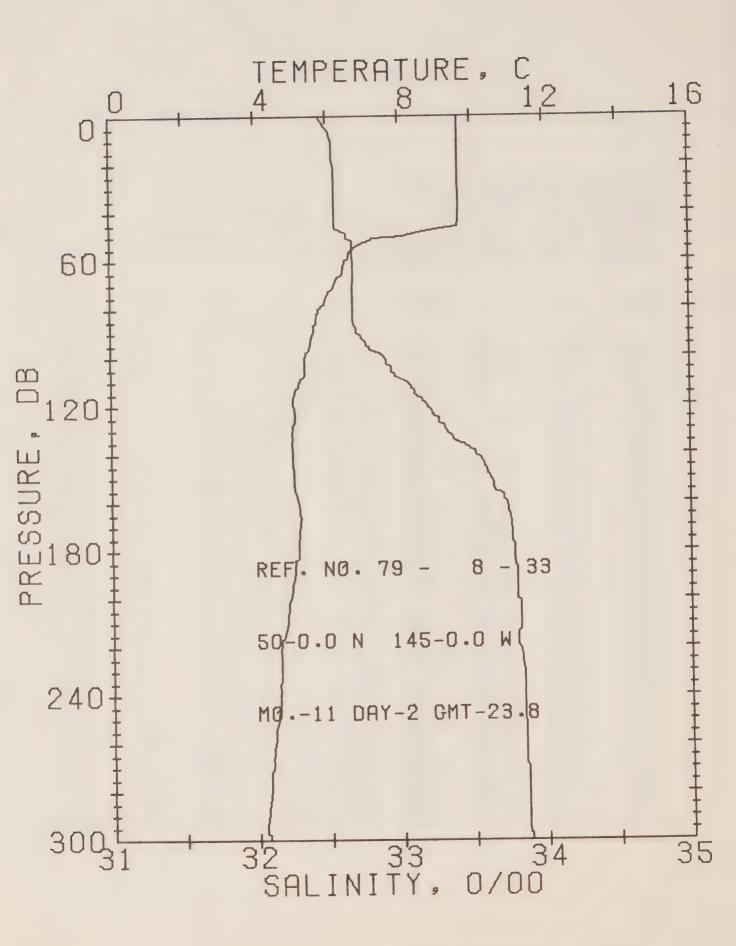
REFERENCE NO. 79- 8- 32 DATE 2/11/79

POSITION 50- .ON, 145- .OW GMT 17.3 STATION P

RESULTS OF STP CAST 190 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	9'.61	32.56	0	25.14	283.7			1/10/
10	9.62	32.56	10			•00	•00	1486.
20	9.63	32.56	20	25.13 25.13	284.0	•28	•01	1486.
30	9.64	32.56	30	25.13		•57	• 06	1486.
40	9.64	32.56	40		284.7	•85	.13	1486.
50	9.64	32.56	50	25.13	284.9	1.14	•23	1487.
				25.13	285.1	1.42	• 36	1487.
60	8.98	32.57	60	25.24	274.5	1.71	•52	1484.
70	6.50	32.66	70	25.67	233.6	1.95	•68	1475.
80 90	6.11	32.68	80	25.73	227.9	2.18	.86	1474.
	5.89	32.68	89	25.76	225.5	2.41	1.06	1473.
100	5.63	32.74	99	25.84	218.1	2.63	1.27	1472.
110	5.49	32.89	109	25.97	205.3	2.84	1.50	1472.
120	5.18	33.06	119	26.14	189.2	3.04	1.73	1471.
130	5.06	33.13	129	26.21	182.8	3.23	1.97	1471.
140	5.03	33.25	139	26.31	173.6	3.40	2.21	1471.
150	4.87	33.36	149	26.41	163.7	3.57	2.46	1471.
160	4.97	33.56	159	26.56	149.9	3.73	2.71	1472.
170	5.10	33.65	169	26.62	144.7	3.87	2.95	1472.
180	4.96	33.69	179	26.67	140.3	4.02	3.21	1472.
190	4.92	33.74	189	26.71	136.2	4.15	3.47	1472.
200	4.82	33.77	199	26.74	133.0	4.29	3.73	1472.
210	4.76	33.79	209	26.77	131.0	4.42	4.01	1472.
220	4.73	33.80	218	26.78	129.9	4.55	4.29	1472.
230	4.64	33.82	228	26.80	127.5	4.68	4.59	1472.
240	4.62	33.83	238	26.81	126.6	4.81	4.89	1472.
250	4.57	33.84	248	26.83	125.5	4.93	5.21	1472.
260	4.44	33.84	258	26.84	124.0	5.06	5.53	1471.
270	4.39	33.86	268	26.86	122.2	5.18	5.87	1471.
280	4.33	33.87	278	26.88	121.0	5.30	6.21	1471.
290	4.32	33.88	288	26.89	120.2	5.42	6.56	1471.
300	4.23	33.88	298	26.90	119.3	5.54	6.92	1471.



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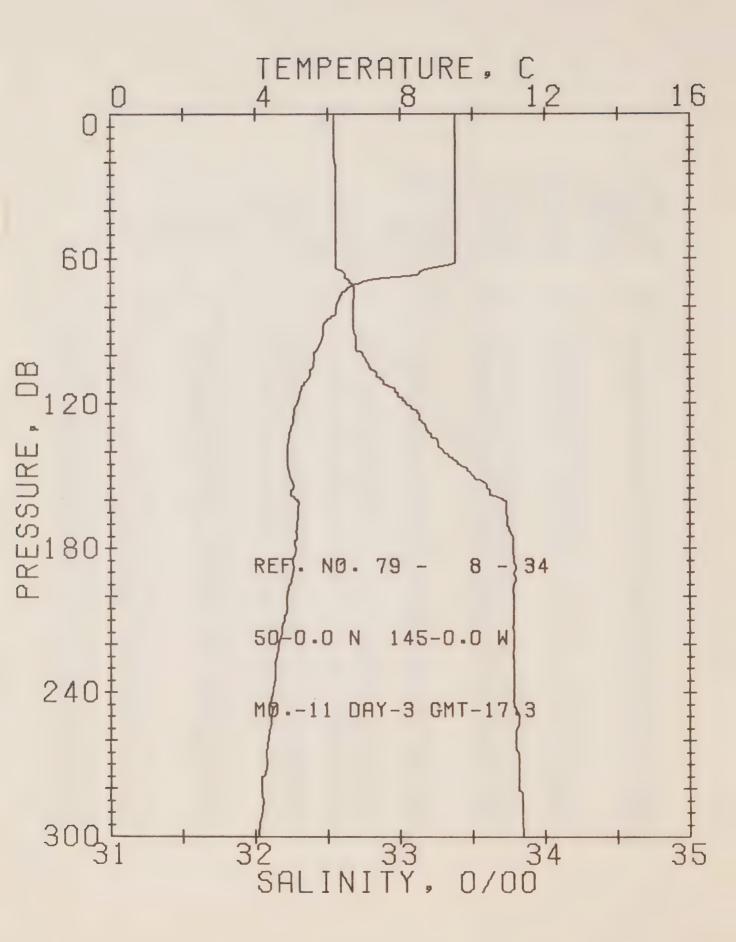
REFERENCE NO. 79- 8- 33 DATE 2/11/79

POSITION 50- .0N, 145- .0W GMT 23.8 STATION P

RESULTS OF STP CAST 191 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
Ū	9.65	32.45	0	25.04	292.5	•00	.00	1486.
10	9.65	32.53	10	25.11	286.7	•29	.01	1486.
20	9.66	32.55	20	25.12	286.0	•58	.06	1486.
30	9.66	32.55	30	25.12	285.8	•86	.13	1487.
40	9.66	32.55	40	25.12	286.0	1.15	.23	1487.
50	8.10	32.63	50	25.42	257.1	1.43	• 36	1481.
60	6.51	32.68	60	25.68	232.6	1.66	•49	1475.
70	6.19	32.67	70	25.72	229.3	1.90	•65	1474.
80	5.75	32.67	80	25.77	224.5	2.12	.82	1472.
90	5.59	32.70	89	25.81	220.5	2.35	1.01	1472.
100	5.35	32.89	99	25.99	203.7	2.56	1.22	1471.
110	5.19	33.04	109	26.13	190.8	2.76	1.43	1471.
120	5.04	33.18	119	26.25	178.7	2.94	1.65	1471.
130	5.00	33.32	129	26.37	167.9	3.12	1.87	1471.
140	5.00	33.52	139	26.53	153.0	3.28	2.09	1471.
150	5.04	33.62	149	26.60	146.1	3.43	2.31	1472.
160	5.16	33.73	159	26.67	139.3	3.57	2.54	1473.
170	5.18	33.76	169	26.70	137.2	3.71	2.77	1473.
180	5.14	33.78	179	26.72	135.6	3.84	3.01	1473.
190	5.02	33.80	189	26.74	132.9	3.98	3.27	1473.
200	4.90	33.80	199	26.76	131.6	4.11	3.53	1472.
210	4.81	33.82	209	26.78	129.3	4.24	3.80	1472.
220	4.63	33.81	218	26.80	128.1	4.37	4.09	1471.
230	4.63	33.84	228	26.82	125.9	4.50	4.38	1472.
240	4.59	33.84	238	26.82	125.6	4.62	4.68	1472.
250	4.53	33.84	248	26.83	124.8	4.75	4.99	1472.
260	4.43	33.85	258	26.85	123.3	4.87	5.31	1471.
270	4.36	33.86	268	26.87	121.9	4.99	5.64	1471.
280	4.33	33.86	278	26.87	121.7	5.12	5.98	1471.
290	4:23	33.86	288	26.88	120.7	5.24	6.34	1471.
300	4.26	33.88	298	26.89	119.6	5.36	6.70	1471.



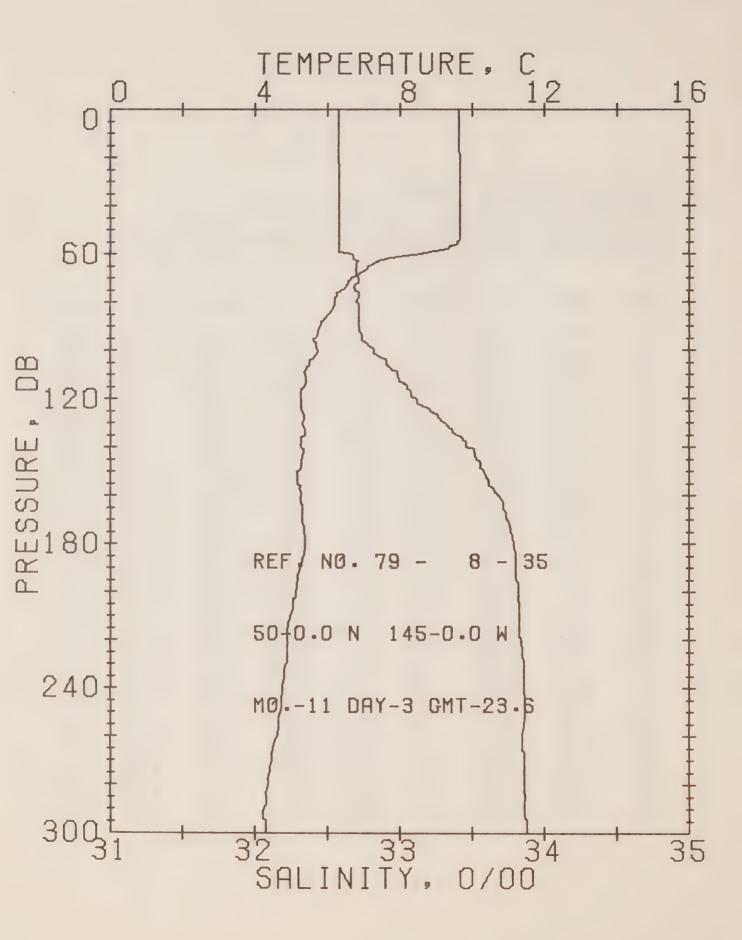
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79-8-34 DATE 3/11/79

POSITION 50-.0N, 145-.0W GMT 17.3 STATION P

RESULTS OF STP CAST 185 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
^	0' 53	70 54	0	T	0.04.	D	EN	4 1. 15 -
0	9.53	32.54	0	25.13	284.0	• 0 0	.00	1486.
10	9.54	32.54	10	25.13	284.3	•28	.01	1486.
20	9.54	32.55	20	25.14	284.0	•57	•06	1486.
30	9.54	32.55	30	25.14	283.9	•85	•13	1486.
40	9.54	32.55	40	25.14	284.1	1.14	•23	1486.
50	9.54	32.55	50	25.14	284.3	1.42	• 36	1486.
60	9.54	32.55	60	25.14	284.5	1.70	•52	1487.
70	6.88	32.65	70	25.61	239.6	1.97	•70	1477.
80	6.23	32.67	80	25.71	230.1	2.20	•88	1474.
90	5.87	32.67	89	25.76	225.5	2.43	1.07	1473.
100	5.63	32.74	99	25.84	218.1	2.65	1.29	1472.
110	5.45	32.87	109	25.96	206.4	2.87	1.52	1472.
120	5.14	33.04	119	26.13	190.3	3.07	1.75	1471.
130	4.98	33.17	129	26.26	178.5	3.25	1.98	1471.
140	4.88	33.30	139	26.37	168.2	3.42	2.22	1471.
150	4.96	33.50	149	26.51	154.2	3.58	2.46	1471.
160	5.15	33.71	159	26.66	140.7	3.73	2.69	1473.
170	5.14	33.74	169	26.68	138.5	3.87	2.92	1473.
180	5.11	33.78	179	26.72	135.2	4.01	3.17	1473.
190	5.03	33.80	189	26.74	133.3	4.14	3.42	1473.
200	4.85	33.79	199	26.76	131.8	4.27	3.68	1472.
210	4.79	33.79	209	26.76	131.2	4.40	3.96	1472.
220	4.63	33.79	218	26.78	129.6	4.54	4.25	1471.
230	4.53	33.79	228	26.79	128.6	4.66	4.54	1471.
240	4.47	33.79	238	26.80	128.0	4.79	4.85	1471.
250	4.42	33.82	248	26.83	125.3	4.92	5.17	1471.
260	4.33	33.80	258	26.82	126.0	5.05	5.49	1471.
270	4.31	33.82	268	26.84	124.4	5.17	5.83	1471.
280	4.15	33.82	278	26.86	122.7	5.29	6.18	1470.
290	4.17	33.84	288	26.87	121.5	5.42	6.53	1471.
300	4.08	33.85	298	26.89	119.9	5.54	6.90	1471.



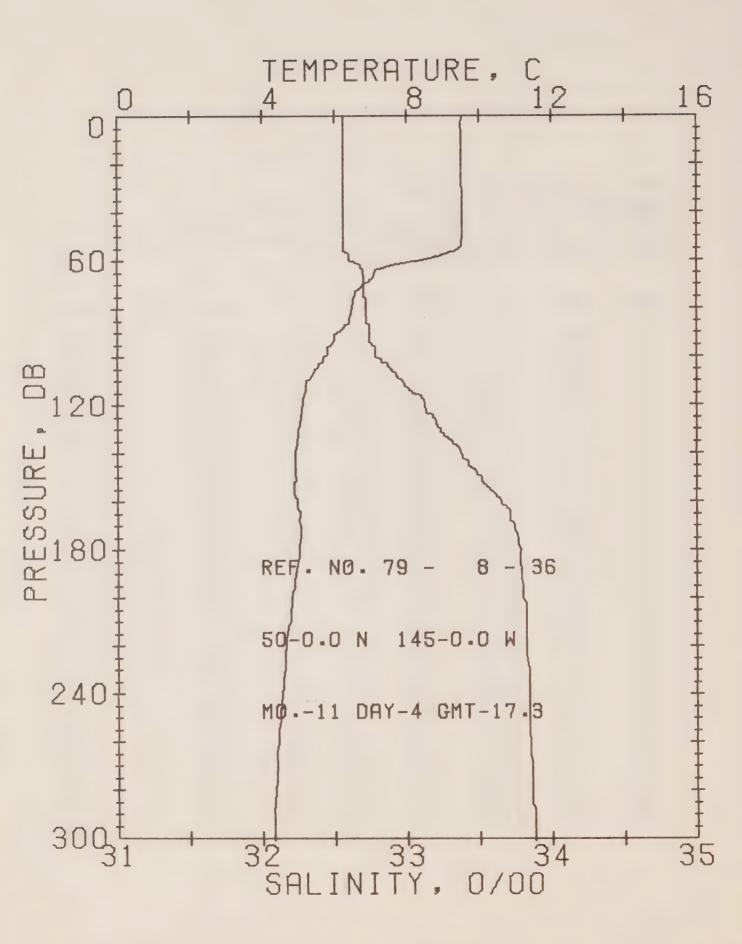
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79-8-35 DATE 3/11/79

POSITION 50-.0N, 145-,0W GMT 23.6 STATION P

RESULTS OF STP CAST 205 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	9.63	32.57	0	25.14	283.3	•00	•00	1486.
10	9.66	32.57	10	25.14	283.9	•28	.01	1486.
20	9.67	32.57	20	25.13	284.2	•57	.06	1486.
30	9.67	32.58	30	25.14	283.7	•85	•13	1487.
40	9.67	32.58	40	25.14	283.9	1.14	.23	1487.
50	9.67	32.58	50	25.14	284.1	1.42	•36	1487.
60	8.58	32.66	60	25.38	261.9	1.70	•52	1483.
70	6.66	32.71	70	25.69	232.3	1.94	•68	1476.
80	6.19	32.70	80	25.74	227.4	2.17	.85	1474.
90	5.78	32.71	89	25.80	221.9	2.40	1.05	1473.
100	5.73	32.82	99	25.89	213.2	2.61	1.26	1473.
110	5.38	32.98	109	26.06	197.4	2.82	1.48	1472.
120	5.26	33.10	119	26.16	187.2	3.01	1.71	1472.
130	5.32	33.31	129	26.32	172.2	3.19	1.93	1472.
140	5.27	33.46	139	26.45	160.5	3.36	2.16	1472.
150	5.17	33.58	149	26.55	150.6	3.51	2.39	1472.
160	5.29	33.68	159	26.62	144.5	3.66	2.63	1473.
170	5.31	33.74	169	26.66	140.4	3.80	2.86	1473.
180	5.39	33.79	179	26.69	137.7	3.94	3.11	1474.
190	5.22	33.80	189	26.72	135.1	4.08	3.37	1473.
200	5.13	33.82	199	26.75	132.7	4.21	3.64	1473.
210	4.97	33.83	209	26.77	130.2	4.34	3.91	1473.
220	4.88	33.84	218	26.79	128.6	4.47	4.19	1473.
230	4.86	33.86	228	26.81	126.9	4.60	4.49	1473.
240	4.75	33.86	238	26.82	125.9	4.73	4.79	1472.
250	4.70	33.87	248	26.84	124.7	4.85	5.10	1472.
260	4.58	33.85	258	26.83	124.9	4.98	5.43	1472.
270	4.45	33.86	268	26.86	122.9	5.10	5.76	1472.
280	4.34	33.86	278	26.87	121.8	5.22	6.10	1471.
290	4.24	33.86	288	26.88	120.8	5.34	6.46	1471.
300	4.29	33.88	298	26.89	119.9	5.46	6.82	1471.



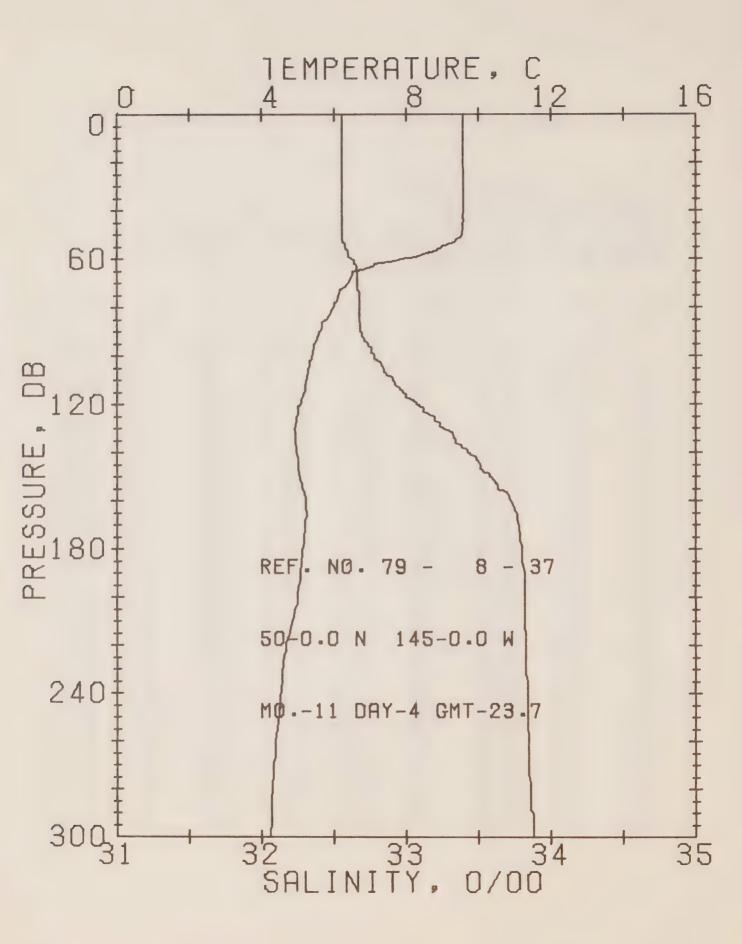
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79-8-36 DATE 4/11/79

POSITION 50-.0N, 145-,0W GMT 17.3 STATION P

RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	0.51	30 E4	0	7 25 15	202	D	EN	1005
0	9.51	32.56	0	25.15	282.2	•00	•00	1485.
10	9.52	32.56	10	25.15	282.5	•28	•01	1486.
20	9.52	32.56	20	25.15	282.7	•56	•06	1486.
30	9.54	32.56	30	25.15	283.1	•85	•13	1486.
40	9.54	32.56	40	25.15	283.4	1.13	•23	1486.
50	9.54	32.56	50	25.15	283.5	1.41	• 36	1486.
60	8.42	32.60	60	25.35	264.0	1.69	•52	1482.
70	6.77	32.70	70	25.66	234.5	1.94	•68	1476.
80	6.47	32.71	80	25.71	230.1	2.17	•85	1475.
90	6.07	32.74	89	25.78	223.1	2.39	1.05	1474.
100	5.71	32.78	99	25.86	216.0	2.61	1.26	1473.
110	5.23	32.97	109	26.07	196.4	2.82	1.48	1471.
120	5.11	33.12	119	26.20	184.0	3.01	1.71	1471.
130	4.99	33.23	129	26.30	174.5	3.19	1.94	1471.
140	4.92	33.38	139	26.42	162.8	3.36	2.17	1471.
150	4.93	33.51	149	26.53	153.1	3.52	2.40	1471.
160	4.95	33.64	159	26.63	143.3	3.66	2.64	1472.
170	5.07	33.74	169	26.69	137.7	3.81	2.87	1472.
180	5.02	33.79	179	26.74	133.5	3.94	3.11	1472.
190	4.91	33.79	189	26.75	132.4	4.07	3.36	1472.
200	4.81	33.80	199	26.77	130.6	4.21	3.63	1472.
210	4.75	33.82	209	26.79	128.5	4.33	3.90	1472.
220	4.63	33.82	218	26.80	127.4	4.46	4.18	1472.
230	4.60	33.84	228	26.82	125.6	4.59	4.47	1472.
240	4.54	33.84	238	26.83	125.0	4.71	4.77	1471.
250	4.47	33.84	248	26.84	124.4	4.84	5.08	1471.
260	4.43	33.85	258	26.85	123.2	4.96	5.40	1471.
270	4.41	33.86	268	26.86	122.4	5.09	5.73	1471.
280	4.35	33.86	278	26.87	121.8	5.21	6.07	1471.
290	4.31	33.88	288	26.89	120.0	5.33	6.43	1471.
300	4.31	33.88	298	26.89	120.1	5.45	6.79	1472.



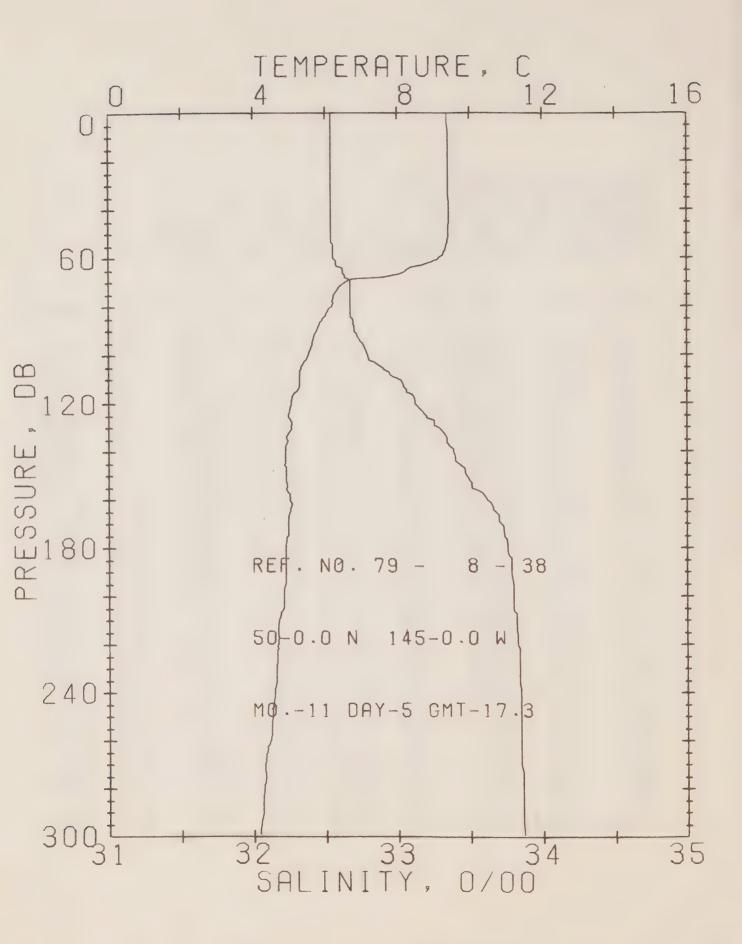
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 37 DATE 4/11/79

POSITION 50- .ON: 145- .OW GMT 23.7 STATION P

RESULTS OF STP CAST 171 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

0         9.57         32.55         0         25.13         283.8         .00         .00         1486.           10         9.58         32.55         10         25.13         284.2         .28         .01         1486.           20         9.58         32.55         20         25.13         284.3         .57         .06         1486.           30         9.59         32.55         30         25.13         284.7         .85         .13         1486.           40         9.59         32.55         40         25.14         284.6         1.42         .36         1486.           50         9.56         32.55         50         25.14         284.6         1.42         .36         1486.           60         7.83         32.62         60         25.45         254.3         1.70         .52         1480.           70         6.37         32.66         70         25.68         232.5         1.93         .67         1475.           80         5.98         32.67         80         25.74         227.2         2.16         .85         1473.           90         5.59         32.68         89	PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
10       9.58       32.55       10       25.13       284.2       .28       .01       1486.         20       9.58       32.55       20       25.13       284.3       .57       .06       1486.         30       9.59       32.55       30       25.13       284.7       .85       .13       1486.         40       9.59       32.55       40       25.13       284.9       1.14       .23       1486.         50       9.56       32.55       50       25.14       284.9       1.14       .23       1486.         60       7.83       32.62       60       25.45       254.3       1.70       .52       1480.         70       6.37       32.66       70       25.68       232.5       1.93       .67       1475.         80       5.98       32.67       80       25.74       227.2       2.16       .85       1473.         90       5.59       32.68       89       25.79       222.0       2.39       1.04       1472.         100       5.39       32.78       99       25.90       212.3       2.61       1.25       1471.         110       5.23				_	T			EN	
20       9.58       32.55       20       25.13       284.3       .57       .06       1486.         30       9.59       32.55       30       25.13       284.7       .85       .13       1486.         40       9.59       32.55       40       25.13       284.9       1.14       .23       1486.         50       9.56       32.55       50       25.14       284.6       1.42       .36       1486.         60       7.83       32.62       60       25.45       25.45       1.70       .52       1480.         70       6.37       32.66       70       25.68       232.5       1.93       .67       1475.         80       5.98       32.67       80       25.74       227.2       2.16       .85       1473.         90       5.59       32.68       89       25.79       222.0       2.39       1.04       1472.         100       5.39       32.78       99       25.90       212.3       2.61       1.25       1471.         110       5.23       32.91       109       26.02       200.9       2.81       1.48       1471.         120       5.06									
30       9.59       32.55       30       25.13       284.7       .85       .13       1486.         40       9.59       32.55       40       25.13       284.9       1.14       .23       1486.         50       9.56       32.55       50       25.14       284.6       1.42       .36       1486.         60       7.83       32.62       60       25.45       254.3       1.70       .52       1480.         70       6.37       32.66       70       25.68       232.5       1.93       .67       1475.         80       5.98       32.67       80       25.74       227.2       2.16       .85       1473.         90       5.59       32.68       89       25.79       222.0       2.39       1.04       1472.         100       5.39       32.78       99       25.90       212.3       2.61       1.25       1471.         110       5.23       32.91       109       26.02       200.9       2.81       1.48       1471.         120       5.06       33.07       119       26.16       187.2       3.01       1.70       1471.         130       4.92 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
40       9.59       32.55       40       25.13       284.9       1.14       .23       1486.         50       9.56       32.55       50       25.14       284.6       1.42       .36       1486.         60       7.83       32.62       60       25.45       254.3       1.70       .52       1480.         70       6.37       32.66       70       25.68       232.5       1.93       .67       1475.         80       5.98       32.67       80       25.74       227.2       2.16       .85       1473.         90       5.59       32.68       89       25.79       222.0       2.39       1.04       1472.         100       5.39       32.78       99       25.90       212.3       2.61       1.25       1471.         110       5.23       32.91       109       26.02       200.9       2.81       1.48       1471.         120       5.06       33.07       119       26.16       187.2       3.01       1.70       1471.         130       4.92       33.25       129       26.32       172.3       3.19       1.93       1470.         140       4.97									
50         9.56         32.55         50         25.14         284.6         1.42         .36         1486.6           60         7.83         32.62         60         25.45         254.3         1.70         .52         1480.70           70         6.37         32.66         70         25.68         232.5         1.93         .67         1475.80           80         5.98         32.67         80         25.74         227.2         2.16         .85         1473.90           90         5.59         32.68         89         25.79         222.0         2.39         1.04         1472.10           100         5.39         32.78         99         25.90         212.3         2.61         1.25         1471.11           110         5.23         32.91         109         26.02         200.9         2.81         1.48         1471.11           120         5.06         33.07         119         26.16         187.2         3.01         1.70         1471.11           130         4.92         33.43         139         26.46         159.4         3.35         2.16         1471.11           150         5.07         33.58 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
60       7.83       32.62       60       25.45       254.3       1.70       .52       1480.         70       6.37       32.66       70       25.68       232.5       1.93       .67       1475.         80       5.98       32.67       80       25.74       227.2       2.16       .85       1473.         90       5.59       32.68       89       25.79       222.0       2.39       1.04       1472.         100       5.39       32.78       99       25.90       212.3       2.61       1.25       1471.         110       5.23       32.91       109       26.02       200.9       2.81       1.48       1471.         120       5.66       33.07       119       26.02       200.9       2.81       1.48       1471.         130       4.92       33.25       129       26.32       172.3       3.19       1.93       1470.         140       4.97       33.43       139       26.46       159.4       3.35       2.16       1471.         150       5.07       33.58       149       26.57       149.4       3.51       2.39       1472.         160 <t< td=""><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	_								
70         6.37         32.66         70         25.68         232.5         1.93         .67         1475.           80         5.98         32.67         80         25.74         227.2         2.16         .85         1473.           90         5.59         32.68         89         25.79         222.0         2.39         1.04         1472.           100         5.39         32.78         99         25.90         212.3         2.61         1.25         1471.           110         5.23         32.91         109         26.02         200.9         2.81         1.48         1471.           120         5.06         33.07         119         26.02         200.9         2.81         1.48         1471.           130         4.92         33.25         129         26.32         172.3         3.19         1.93         1470.           140         4.97         33.43         139         26.46         159.4         3.35         2.16         1471.           150         5.07         33.58         149         26.57         149.4         3.51         2.39         1472.           160         5.22         33.72									
80       5.98       32.67       80       25.74       227.2       2.16       .85       1473.         90       5.59       32.68       89       25.79       222.0       2.39       1.04       1472.         100       5.39       32.78       99       25.90       212.3       2.61       1.25       1471.         110       5.23       32.91       109       26.02       200.9       2.81       1.48       1471.         120       5.06       33.07       119       26.16       187.2       3.01       1.70       1471.         130       4.92       33.25       129       26.32       172.3       3.19       1.93       1470.         140       4.97       33.43       139       26.46       159.4       3.35       2.16       1471.         150       5.07       33.58       149       26.57       149.4       3.51       2.39       1472.         160       5.22       33.72       159       26.66       140.8       3.65       2.62       1473.         170       5.21       33.80       179       26.73       133.9       3.92       3.09       1473.         180									
90       5.59       32.68       89       25.79       222.0       2.39       1.04       1472.         100       5.39       32.78       99       25.90       212.3       2.61       1.25       1471.         110       5.23       32.91       109       26.02       200.9       2.81       1.48       1471.         120       5.06       33.07       119       26.16       187.2       3.01       1.70       1471.         130       4.92       33.25       129       26.32       172.3       3.19       1.93       1470.         140       4.97       33.43       139       26.46       159.4       3.35       2.16       1471.         150       5.07       33.43       139       26.46       159.4       3.51       2.39       1472.         160       5.22       33.72       159       26.66       140.8       3.65       2.62       1473.         170       5.21       33.80       179       26.73       133.9       3.92       3.09       1473.         180       5.12       33.80       179       26.75       132.0       4.06       3.34       1473.         200									
100       5.39       32.78       99       25.90       212.3       2.61       1.25       1471.         110       5.23       32.91       109       26.02       200.9       2.81       1.48       1471.         120       5.06       33.07       119       26.16       187.2       3.01       1.70       1471.         130       4.92       33.25       129       26.32       172.3       3.19       1.93       1470.         140       4.97       33.43       139       26.46       159.4       3.35       2.16       1471.         150       5.07       33.58       149       26.57       149.4       3.51       2.39       1472.         160       5.22       33.72       159       26.66       140.8       3.65       2.62       1473.         170       5.21       33.78       169       26.70       136.5       3.79       2.85       1473.         180       5.12       33.80       179       26.73       133.9       3.92       3.09       1473.         190       5.08       33.82       189       26.75       132.0       4.06       3.34       1473.         210 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
110       5.23       32.91       109       26.02       200.9       2.81       1.48       1471.         120       5.06       33.07       119       26.16       187.2       3.01       1.70       1471.         130       4.92       33.25       129       26.32       172.3       3.19       1.93       1470.         140       4.97       33.43       139       26.46       159.4       3.35       2.16       1471.         150       5.07       33.58       149       26.57       149.4       3.51       2.39       1472.         160       5.22       33.72       159       26.66       140.8       3.65       2.62       1473.         170       5.21       33.78       169       26.70       136.5       3.79       2.85       1473.         180       5.12       33.80       179       26.73       133.9       3.92       3.09       1473.         190       5.08       33.82       189       26.75       132.0       4.06       3.34       1473.         200       4.99       33.82       199       26.76       131.1       4.19       3.60       1473.         210 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
120       5.06       33.07       119       26.16       187.2       3.01       1.70       1471.         130       4.92       33.25       129       26.32       172.3       3.19       1.93       1470.         140       4.97       33.43       139       26.46       159.4       3.35       2.16       1471.         150       5.07       33.58       149       26.57       149.4       3.51       2.39       1472.         160       5.22       33.72       159       26.66       140.8       3.65       2.62       1473.         170       5.21       33.78       169       26.70       136.5       3.79       2.85       1473.         180       5.12       33.80       179       26.73       133.9       3.92       3.09       1473.         190       5.08       33.82       189       26.75       132.0       4.06       3.34       1473.         200       4.99       33.82       199       26.76       131.1       4.19       3.60       1473.         210       4.85       33.83       218       26.81       127.1       4.45       4.16       1472.         220 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
130       4.92       33.25       129       26.32       172.3       3.19       1.93       1470.         140       4.97       33.43       139       26.46       159.4       3.35       2.16       1471.         150       5.07       33.58       149       26.57       149.4       3.51       2.39       1472.         160       5.22       33.72       159       26.66       140.8       3.65       2.62       1473.         170       5.21       33.78       169       26.70       136.5       3.79       2.85       1473.         180       5.12       33.80       179       26.73       133.9       3.92       3.09       1473.         190       5.08       33.82       189       26.75       132.0       4.06       3.34       1473.         200       4.99       33.82       199       26.76       131.1       4.19       3.60       1473.         210       4.85       33.82       209       26.78       129.6       4.32       3.87       1472.         220       4.68       33.83       218       26.81       127.1       4.45       4.16       1472.         230 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
140       4.97       33.43       139       26.46       159.4       3.35       2.16       1471.         150       5.07       33.58       149       26.57       149.4       3.51       2.39       1472.         160       5.22       33.72       159       26.66       140.8       3.65       2.62       1473.         170       5.21       33.78       169       26.70       136.5       3.79       2.85       1473.         180       5.12       33.80       179       26.73       133.9       3.92       3.09       1473.         190       5.08       33.82       189       26.75       132.0       4.06       3.34       1473.         200       4.99       33.82       199       26.76       131.1       4.19       3.60       1473.         210       4.85       33.82       209       26.78       129.6       4.32       3.87       1472.         220       4.68       33.83       218       26.81       127.1       4.45       4.16       1472.         230       4.58       33.83       228       26.82       126.1       4.57       4.45       1471.         240 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
150       5.07       33.58       149       26.57       149.4       3.51       2.39       1472.         160       5.22       33.72       159       26.66       140.8       3.65       2.62       1473.         170       5.21       33.78       169       26.70       136.5       3.79       2.85       1473.         180       5.12       33.80       179       26.73       133.9       3.92       3.09       1473.         190       5.08       33.82       189       26.75       132.0       4.06       3.34       1473.         200       4.99       33.82       199       26.76       131.1       4.19       3.60       1473.         210       4.85       33.82       209       26.78       129.6       4.32       3.87       1472.         220       4.68       33.83       218       26.81       127.1       4.45       4.16       1472.         230       4.58       33.83       228       26.82       126.1       4.57       4.45       1471.         240       4.52       33.84       238       26.83       124.8       4.70       4.75       1471.         250 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
160       5.22       33.72       159       26.66       140.8       3.65       2.62       1473.         170       5.21       33.78       169       26.70       136.5       3.79       2.85       1473.         180       5.12       33.80       179       26.73       133.9       3.92       3.09       1473.         190       5.08       33.82       189       26.75       132.0       4.06       3.34       1473.         200       4.99       33.82       199       26.76       131.1       4.19       3.60       1473.         210       4.85       33.82       209       26.78       129.6       4.32       3.87       1472.         220       4.68       33.83       218       26.81       127.1       4.45       4.16       1472.         230       4.58       33.83       228       26.82       126.1       4.57       4.45       1471.         240       4.52       33.84       238       26.83       124.8       4.70       4.75       1471.         250       4.47       33.84       248       26.84       122.8       4.95       5.38       1471.         260 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
170       5.21       33.78       169       26.70       136.5       3.79       2.85       1473.         180       5.12       33.80       179       26.73       133.9       3.92       3.09       1473.         190       5.08       33.82       189       26.75       132.0       4.06       3.34       1473.         200       4.99       33.82       199       26.76       131.1       4.19       3.60       1473.         210       4.85       33.82       209       26.78       129.6       4.32       3.87       1472.         220       4.68       33.83       218       26.81       127.1       4.45       4.16       1472.         230       4.58       33.83       228       26.82       126.1       4.57       4.45       1471.         240       4.52       33.84       238       26.83       124.8       4.70       4.75       1471.         250       4.47       33.84       248       26.84       124.3       4.82       5.06       1471.         260       4.38       33.85       258       26.86       122.8       4.95       5.31       6.05       1471.									
180       5.12       33.80       179       26.73       133.9       3.92       3.09       1473.         190       5.08       33.82       189       26.75       132.0       4.06       3.34       1473.         200       4.99       33.82       199       26.76       131.1       4.19       3.60       1473.         210       4.85       33.82       209       26.78       129.6       4.32       3.87       1472.         220       4.68       33.83       218       26.81       127.1       4.45       4.16       1472.         230       4.58       33.83       228       26.82       126.1       4.57       4.45       1471.         240       4.52       33.84       238       26.83       124.8       4.70       4.75       1471.         250       4.47       33.84       248       26.84       124.3       4.82       5.06       1471.         260       4.38       33.85       258       26.86       122.8       4.95       5.38       1471.         280       4.30       33.86       278       26.87       121.3       5.19       6.05       1471.         290 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
190       5.08       33.82       189       26.75       132.0       4.06       3.34       1473.         200       4.99       33.82       199       26.76       131.1       4.19       3.60       1473.         210       4.85       33.82       209       26.78       129.6       4.32       3.87       1472.         220       4.68       33.83       218       26.81       127.1       4.45       4.16       1472.         230       4.58       33.83       228       26.82       126.1       4.57       4.45       1471.         240       4.52       33.84       238       26.83       124.8       4.70       4.75       1471.         250       4.47       33.84       248       26.84       124.3       4.82       5.06       1471.         260       4.38       33.85       258       26.86       122.8       4.95       5.38       1471.         270       4.33       33.85       268       26.86       122.3       5.07       5.71       1471.         280       4.30       33.86       278       26.87       121.3       5.19       6.05       1471.         290 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
200       4.99       33.82       199       26.76       131.1       4.19       3.60       1473.         210       4.85       33.82       209       26.78       129.6       4.32       3.87       1472.         220       4.68       33.83       218       26.81       127.1       4.45       4.16       1472.         230       4.58       33.83       228       26.82       126.1       4.57       4.45       1471.         240       4.52       33.84       238       26.83       124.8       4.70       4.75       1471.         250       4.47       33.84       248       26.84       124.3       4.82       5.06       1471.         260       4.38       33.85       258       26.86       122.8       4.95       5.38       1471.         270       4.33       33.85       268       26.86       122.3       5.07       5.71       1471.         280       4.30       33.86       278       26.87       121.3       5.19       6.05       1471.         290       4.26       33.87       288       26.88       120.3       5.31       6.40       1471.									
210       4.85       33.82       209       26.78       129.6       4.32       3.87       1472.         220       4.68       33.83       218       26.81       127.1       4.45       4.16       1472.         230       4.58       33.83       228       26.82       126.1       4.57       4.45       1471.         240       4.52       33.84       238       26.83       124.8       4.70       4.75       1471.         250       4.47       33.84       248       26.84       124.3       4.82       5.06       1471.         260       4.38       33.85       258       26.86       122.8       4.95       5.38       1471.         270       4.33       33.85       268       26.86       122.3       5.07       5.71       1471.         280       4.30       33.86       278       26.87       121.3       5.19       6.05       1471.         290       4.26       33.87       288       26.88       120.3       5.31       6.40       1471.									
220       4.68       33.83       218       26.81       127.1       4.45       4.16       1472.         230       4.58       33.83       228       26.82       126.1       4.57       4.45       1471.         240       4.52       33.84       238       26.83       124.8       4.70       4.75       1471.         250       4.47       33.84       248       26.84       124.3       4.82       5.06       1471.         260       4.38       33.85       258       26.86       122.8       4.95       5.38       1471.         270       4.33       33.85       268       26.86       122.3       5.07       5.71       1471.         280       4.30       33.86       278       26.87       121.3       5.19       6.05       1471.         290       4.26       33.87       288       26.88       120.3       5.31       6.40       1471.									
230       4.58       33.83       228       26.82       126.1       4.57       4.45       1471.         240       4.52       33.84       238       26.83       124.8       4.70       4.75       1471.         250       4.47       33.84       248       26.84       124.3       4.82       5.06       1471.         260       4.38       33.85       258       26.86       122.8       4.95       5.38       1471.         270       4.33       33.85       268       26.86       122.3       5.07       5.71       1471.         280       4.30       33.86       278       26.87       121.3       5.19       6.05       1471.         290       4.26       33.87       288       26.88       120.3       5.31       6.40       1471.									
240       4.52       33.84       238       26.83       124.8       4.70       4.75       1471.         250       4.47       33.84       248       26.84       124.3       4.82       5.06       1471.         260       4.38       33.85       258       26.86       122.8       4.95       5.38       1471.         270       4.33       33.85       268       26.86       122.3       5.07       5.71       1471.         280       4.30       33.86       278       26.87       121.3       5.19       6.05       1471.         290       4.26       33.87       288       26.88       120.3       5.31       6.40       1471.									
250       4.47       33.84       248       26.84       124.3       4.82       5.06       1471.         260       4.38       33.85       258       26.86       122.8       4.95       5.38       1471.         270       4.33       33.85       268       26.86       122.3       5.07       5.71       1471.         280       4.30       33.86       278       26.87       121.3       5.19       6.05       1471.         290       4.26       33.87       288       26.88       120.3       5.31       6.40       1471.									
260       4.38       33.85       258       26.86       122.8       4.95       5.38       1471.         270       4.33       33.85       268       26.86       122.3       5.07       5.71       1471.         280       4.30       33.86       278       26.87       121.3       5.19       6.05       1471.         290       4.26       33.87       288       26.88       120.3       5.31       6.40       1471.									
270       4.33       33.85       268       26.86       122.3       5.07       5.71       1471.         280       4.30       33.86       278       26.87       121.3       5.19       6.05       1471.         290       4.26       33.87       288       26.88       120.3       5.31       6.40       1471.		4.38							
280 4.30 33.86 278 26.87 121.3 5.19 6.05 1471. 290 4.26 33.87 288 26.88 120.3 5.31 6.40 1471.		4.33							
	280	4.30		278			5.19		
300 4.24 33.88 298 26.89 119.4 5.43 6.76 1471.	290	4.26	33.87	288	26.88	120.3	5.31	6.40	1471.
	300	4.24	33.88	298	26.89	119.4	5.43	6.76	1471.



OFFSHORE OCEANOGRAPHY GROUP

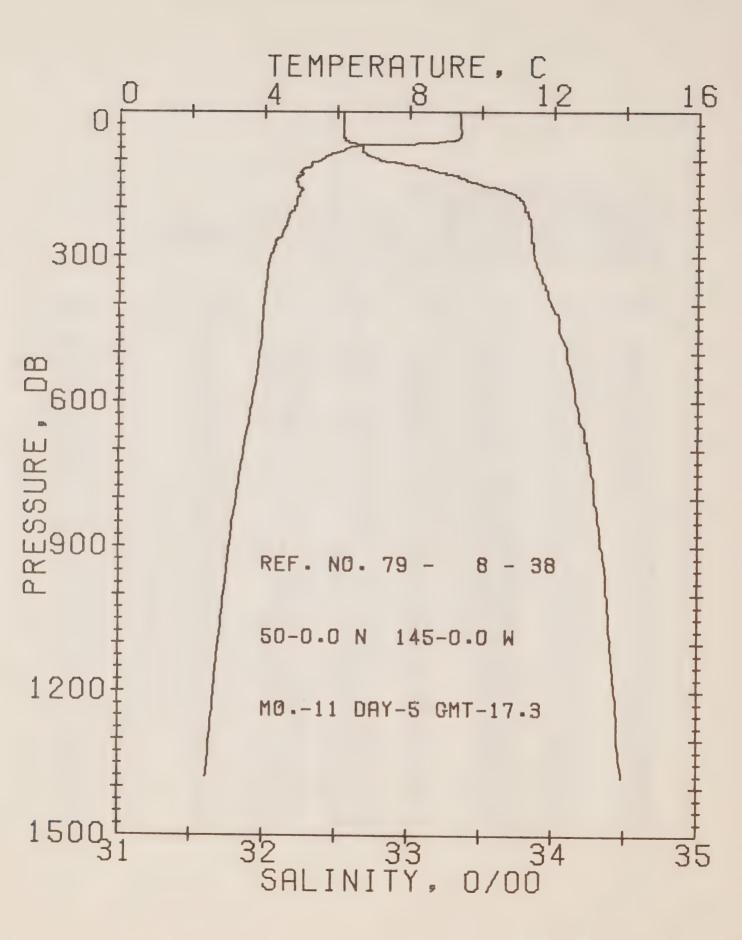
REFERENCE NO. 79- 8- 38 DATE 5/11/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 199 POINTS TAKEN FROM ANALOG TRACE

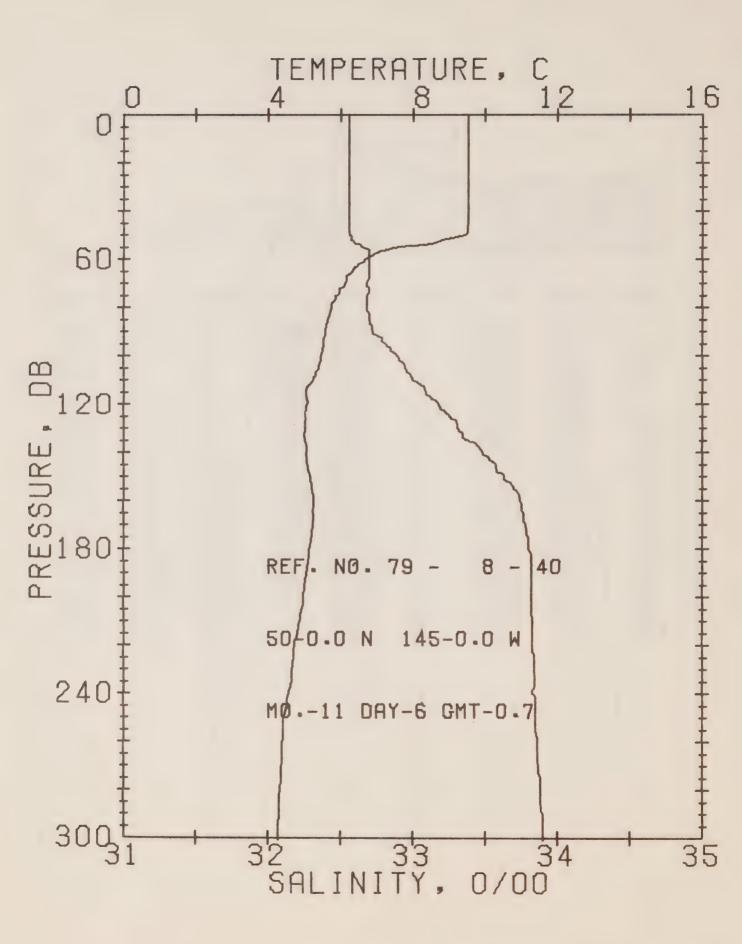
GUILDLINE WAS USED, PRESSURES ARE INPUT

10 9:41 32.54 10 25.15 282.3 .28 .01 1	485. 485. 486. 486. 486. 486.
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260 4.45 33.85 258 26.85 123.5 4.97 5.40 1	471.
270 4.30 33.85 268 26.86 122.0 5.09 5.73 1	471.
	471.
290 4.24 33.86 288 26.88 120.8 5.34 6.42 1	471.
300 4.16 33.87 298 26.89 119.3 5.46 6.78 1	471.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 38 DATE 5/11/79
POSITION 50- .0N, 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 328 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	9.40	32.54	0	25.15	282.0	•00	•00	1485.
10	9.41	32.54	10	25.15	282.3	•28	.01	1485.
20	9.42	32.54	20	25.15	282.6		•06	1485.
	9'.42					•56		
30		32.54	30	25.15	282.8	•85	.13	1486.
50	9.42	32.54	50	25.15	283.2	1.41	• 36	1486.
75	6.25	32.67	75	25.71	230.3	2.07	•78	1474.
100	5.51	32.80	99	25.90	212.6	2.63	1.27	1472.
125	4.96	33.20	124	26.28	176.4	3.11	1.82	1470.
150	4.91	33.48	149	26.50	155.1	3.52	2.40	1471.
175	4.96	33.74	174	26.70	136.5	3.88	3.00	1472.
200	4.83	33.80	199	26.77	130.8	4.21	3.63	1472.
225	4.64	33.84	223	26.82	126.0	4.54	4.32	1472.
250	4.50	33.85	248	26.84	124.0	4.85	5.08	1471.
300	4.16	33.87	298	26.89	119.3	5.46	6.78	1471.
400	3.99	33.99	397	27.01	109.4	6.60	10.86	1472.
500	3.87	34.09	496	27.10	101.4	7.65	15.67	1473.
600	3.68	34.15	595	27.17	95.6	8.63	21.17	1474.
800	3.23	34.29	793	27.32	82.0	10.39	33.66	1476.
1000	2.90	34.37	990	27.42	73.5	11.94	47.80	1478.
1200	2.64	34.43	1188	27.48	67.7	13.35	63.61	1480.



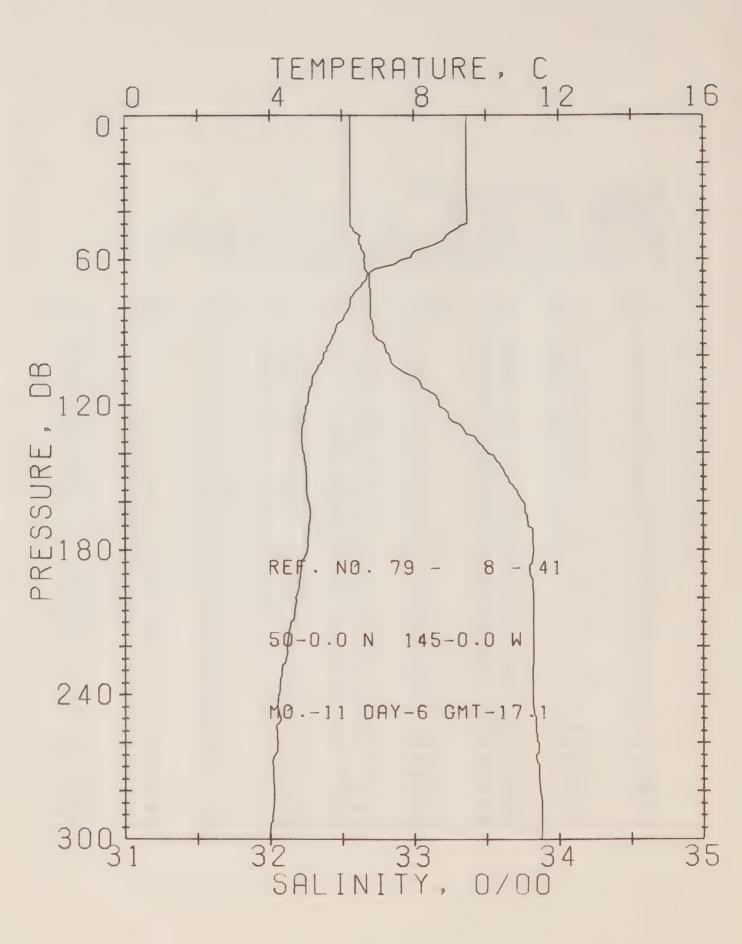
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 40 DATE 6/11/79

POSITION 50- .ON, 145- .OW GMT .7 STATION P

RESULTS OF STP CAST 187 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	9.53	32.55	0	25.14	283.2	•00	•00	1486.
10	9.55	32.55	10	25.14	283.7	•28	.01	1486.
20	9.54	32.55	20	25.14	283.8	•57	.06	1486.
30	9.54	32.55	30	25.14	283.9	•85	.13	1486.
40	9.54	32.55	40	25.14	284.1	1.14	.23	1486.
50	9'.44	32.56	50	25.16	282.0	1.42	•36	1486.
60	6'.66	32.69	60	25.67	233.7	1.67	•50	1476.
70	6.12	32.68	70	25.73	228.0	1.90	•66	1474.
80	5.72	32.68	80	25.78	223.4	2.13	.83	1472.
90	5.57	32.71	89	25.82	219.1	2.35	1.02	1472.
100	5.45	32.89	99	25.98	204.8	2.56	1.22	1472.
110	5.22	33.00	109	26.09	194.1	2.76	1.44	1471.
120	5 08	33.17	119	26.24	179.9	2.95	1.66	1471.
130	5.01	33.31	129	26.36	168.8	3.12	1.88	1471.
140	5.05	33.48	139	26.49	156.6	3.28	2.10	1471.
150	5.16	33.63	149	26.59	146.7	3.43	2.32	1472.
160	5.24	33.74	159	26.67	139.5	3.58	2.55	1473.
170	5.22	33.78	169	26.71	136.4	3.71	2.78	1473.
180	5,13	33.80	179	26.73	134.0	3.85	3.02	1473.
190	5.05	33.82	189	26.76	131.7	3.98	3.27	1473.
200	4.96	33.82	199	26.77	130.8	4 • 11	3.53	1473.
210	4.86	33.83	209	26.79	129.0	4.24	3.80	1472.
220	4.71	33.83	218	26.80	127.5	4.37	4.09	1472.
230	4.65	33.84	228	26.82	126.2	4.50	4.38	1472.
240	4.55	33.83	238	26.82	125.9	4.62	4.68	1472.
250	4.41	33.85	248	26.85	123.0	4.75	4.99	1471.
260	4.38	33.86	258	26.86	122.0	4.87	5.31	1471.
270	4.35	33.87	268	26.87	121.3	4.99	5.63	1471.
280	4.31	33.88	278	26.89	120.0	5.11	5.97	1471.
290	4.29	33.89	288	26.90	118.7	5.23	6.32	1471.
300	4.27	33.90	298	26.91	118.2	5.35	6.67	1471.



OFFSHORE OCEANOGRAPHY GROUP

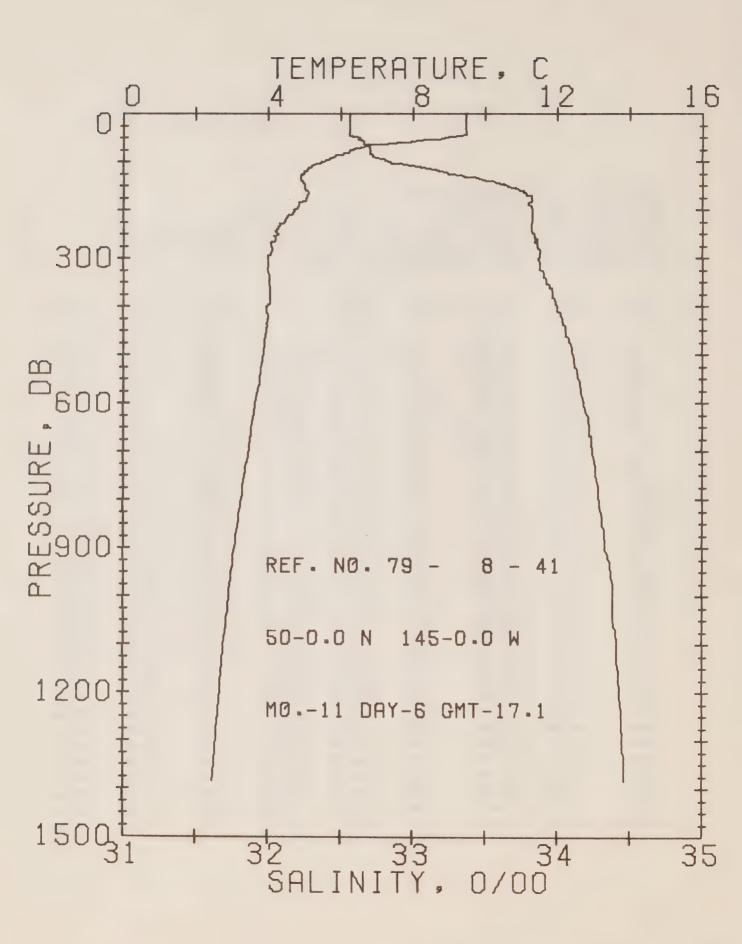
REFERENCE NO. 79- 8- 41 DATE 6/11/79

POSITION 50- .ON, 145- ,OW GMT. 17.1 STATION P

RESULTS OF STP CAST 2U8 POINTS TAKEN FROM ANALOG TRACE

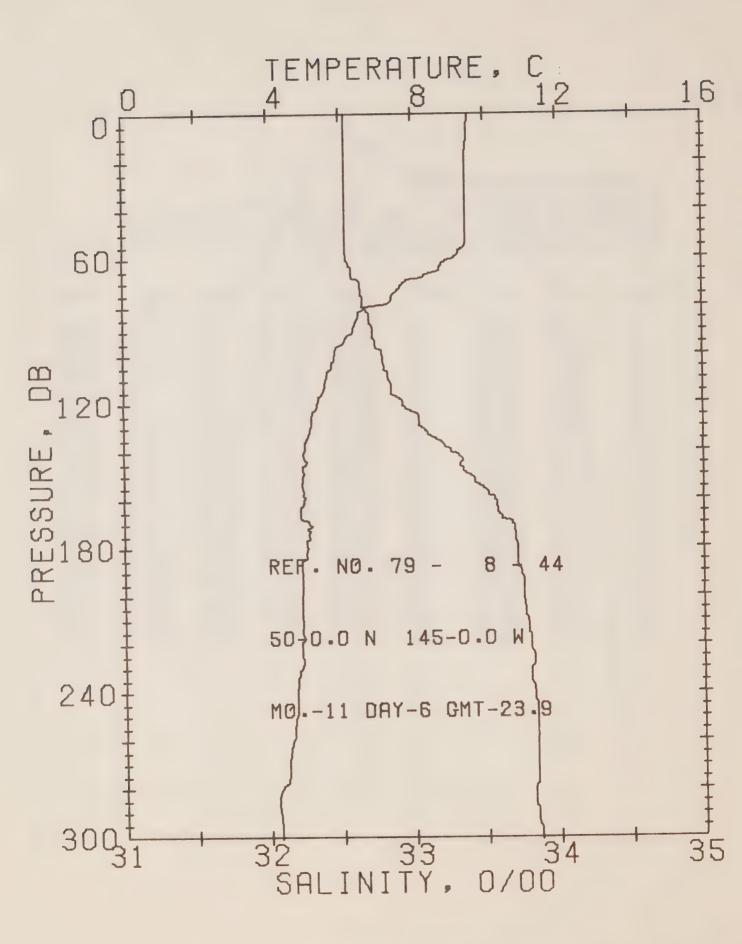
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.48	32.56	0	25.16	281.7	•00	.00	1485.
10	9.47	32.56	10	25.16	281.7	•28	.01	1485.
20	9.47	32.56	20	25.16	281.9	• 56	•06	1486.
30	9.47	32.56	30	25.16	282.1	•85	.13	1486.
40	9.48	32.56	40	25.16	282.4	1.13	.23	1486.
50	8.92	32.63	50	25.30	269.0	1.41	. • 36	1484.
60	7.67	32.65	60	25.50	249.9	1.67	•50	1480.
70	6.56	32.69	70	25.68	232.6	1.91	•66	1475.
80	6.21	32.70	80	25.74	227.7	2.14	.84	1474.
90	5.82	32.72	89	25.80	221.7	2.36	1.03	1473.
100	5.49	32.84	99	25.93	209.3	2.58	1.24	1472.
110	5 • 18	33.04	109	26.13	190.6	2.78	1.46	1471.
120	5.05	33.17	119	26.24	179.6	2.96	1.67	1471.
130	4.89	33.35	129	26.40	164.5	3.13	1.89	1470.
140	4.93	33.51	139	26.53	153.0	3.29	2.11	1471.
150	5.01	33.65	149	26.63	143.5	3.44	2.33	1472.
160	5.08	33.76	159	26.71	136.2	3.58	2.55	1472.
170	5.08	33.79	169	26.73	134.1	3.71	2.78	1472.
180	5.04	33.83	179	26.77	130.7	3.85	3.01	1473.
190	4.84	33.80	189	26.77	130.8	3.98	3.26	1472.
200	4.70	33.83	199	26.80	127.2	4.11	3.51	1471.
210	4.57	33.83	209	26.82	125.8	4.23	3.78	1471.
220	4.47	33.83	218	26.83	124.8	4.36	4.05	1471.
230	4.32	33.82	228	26.84	124.1	4.48	4.34	1470.
240	4.24	33.82	238	26.85	123.3	4.61	4.63	1470.
250	4.29	33.84	248	26.86	122.5	4.73	4.94	1471.
260	4.21	33.86	258	26.88	120.2	4.85	5.26	1470.
270	4.07	33.86	268	26.90	118.8	4.97	5.58	1470.
280	4.10	33.87	278	26.90	118.5	5.09	5.91	1470.
290	4.07	33.88	288	26.91	117.5	5.21	6.25	1470.
300	3.99	33.87	298	26.91	117.5	5.32	6.61	1470.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 41 DATE 6/11/79
POSITION 50- .0N, 145- .0W GMT 17.1 STATION P
RESULTS OF STP CAST 361 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	9.48	32.56	0	25.16	281.7	•00	.00	1485.
10	9.47	32.56	10	25.16	281.7	•28	.01	1485.
20	9.47	32.56	20	25.16	281.9	• 56	•06	1486.
30	9.47	32.56	30	25.16	282.1	•85	•13	1486.
50	8.92	32.63	50	25.30	269.0	1.41	• 36	1484.
75	6.30	32.70	75	25.72	228.7	2.02	•75	1474.
100	5.49	32.84	99	25.93	209.3	2.58	1.24	1472.
125	4.94	33.24	124	26.31	173.2	3.05	1.78	1470.
150	5.01	33.65	149	26.63	143.5	3.44	2.33	1472.
175	5.05	33.82	174	26.76	131.5	3.78	2.89	1472.
200	4.70	33.83	199	26.80	127.2	4.11	3.51	1471.
225	4.42	33.83	223	26.84	124.4	4.42	4.19	1471.
250	4.29	33.84	248	26.86	122.5	4.73	4.94	1471.
300	3,99	33.87	298	26.91	117.5	5.32	6.61	1470.
400	3.96	34.00	397	27.02	108.3	6.46	10.66	1472.
500	3.86	34.10	496	27.11	100.3	7.51	15.44	1473.
600	3.63	34.18	595	27.19	93.1	8.47	20.86	1474.
800	3.24	34.28	793	27.31	82.6	10.22	33.29	1476.
1000	2.90	34.38	990	27.42	73.0	11.77	47.43	1478.
1200	2.66	34.43	1188	27.48	67.8	13.17	63.21	1480.



OFFSHORE OCEANOGRAPHY GROUP

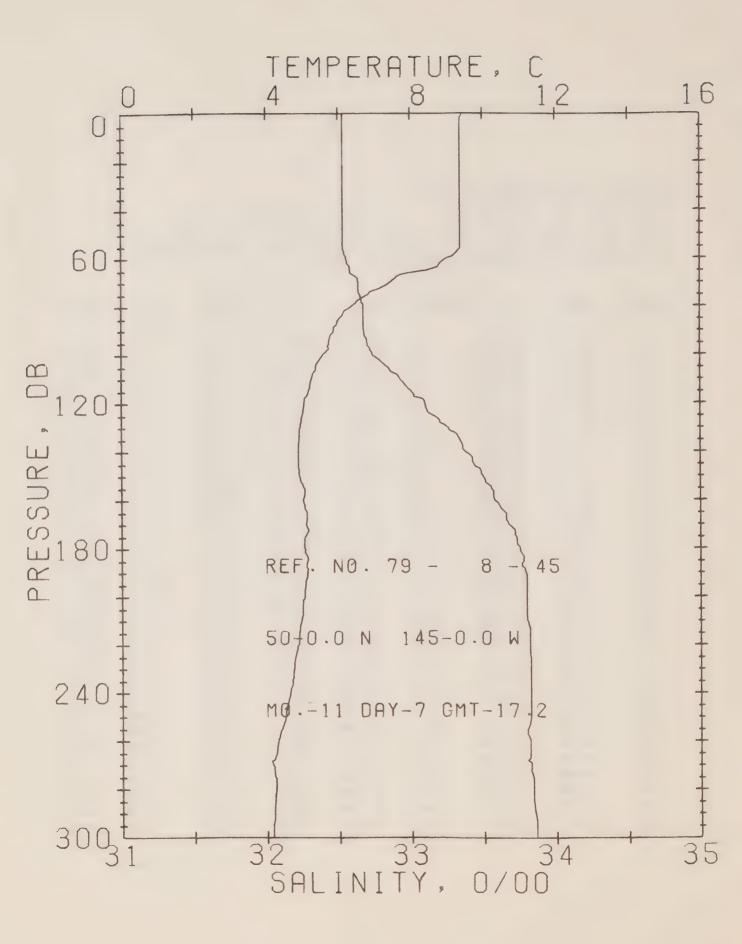
REFERENCE NO. 79- 8- 44 DATE 6/11/79

POSITION 50- .ON, 145- .OW GMT 23.9 STATION P

RESULTS OF STP CAST 217 POINTS TAKEN FROM ANALOG TRACE

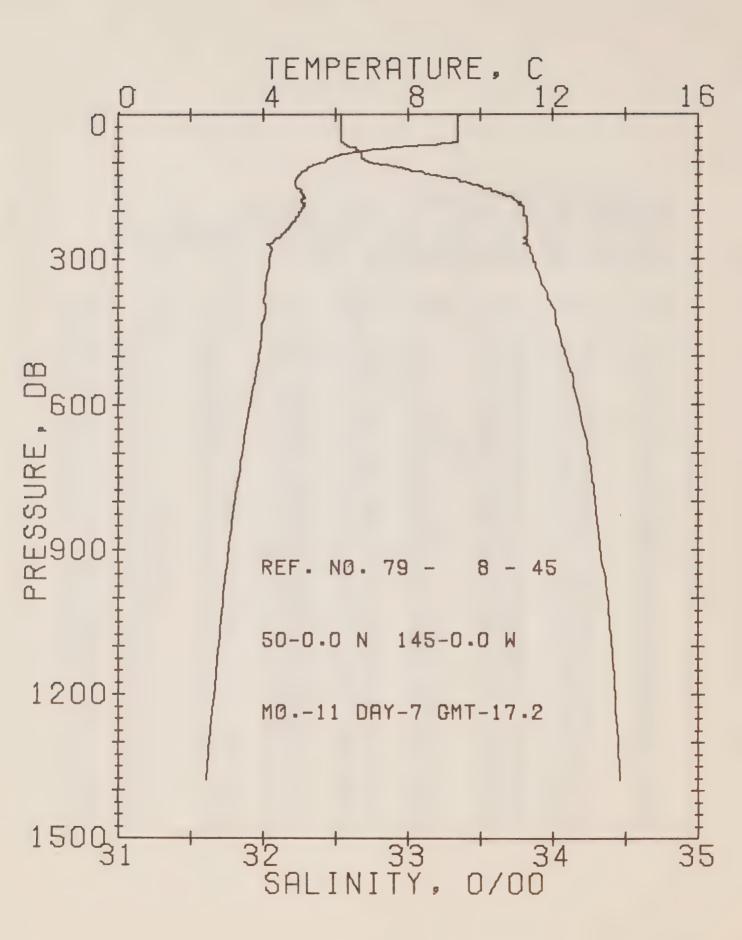
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	9.57	32.53	0	25.12	285.3	•00	.00	1486.
10	9.55	32.53	10	25.12	285.2	•29	.01	1486.
20	9.50	32.53	20	25.13	284.5	•57	.06	1486.
30	9.49	32.53	30	25.13	284.6	•85	•13	1486.
40	9.48	32.53	40	25.13	284.6	1.14	.23	1486.
50	9.48	32.53	50	25.13	284.8	1.42	•36	1486.
60	9.15	32.54	60	25.19	279.2	1.71	•52	1485.
70	7.77	32.63	70	25.47	252.9	1.98	.70	1480.
80	6.68	32.65	80	25.64	237.2	2.22	.89	1476.
90	6.35	32.72	89	25.73	228.0	2.45	1.09	1475.
100	5.83	32.78	99	25.85	217.0	2.68	1.30	1473.
110	5.57	32.83	109	25.92	210.7	2.89	1.53	1472.
120	5.34	32.93	119	26.02	200.8	3.10	1.78	1472.
130	5.14	33.06	129	26.15	188.9	3.29	2.02	1471.
140	4.97	33.26	139	26.32	172.2	3.47	2.27	1471.
150	4.93	33.40	149	26.44	161.3	3.64	2.52	1471.
160	4.96	33.56	159	26.56	149.8	3.79	2.76	1472.
170	5.12	33.68	169	26.64	142.7	3.94	3.01	1473.
180	5.07	33.71	179	26.67	140.0	4.08	3.26	1473.
190	4.92	33.74	189	26.71	136.2	4.22	3.52	1472.
200	4.89	33.75	199	26.72	135.3	4.36	3.79	1472.
210	4.90	33.78	209	26.74	133.2	4.49	4.07	1472.
220	4.85	33.80	218	26.76	131.2	4.62	4.36	1472.
230	4.85	33.80	228	26.76	131.4	4.75	4.66	1473.
240	4.73	33.83	238	26.80	127.9	4.88	4.97	1472.
250	4.70	33.84	248	26.81	126.9	5.01	5.29	1472.
260	4.59	33.84	258	26.82	125.8	5.14	5.62	1472.
270	4.49	33.84	268	26.84	124.8	5.26	5.96	1472.
280	4.28	33.83	278	26.85	123.7	5.39	6.30	1471.
290	4'.22	33.84	288	26.86	122.1	5.51	6.66	1471.
300	4.27	33.86	298	26.88	121.2	5.63	7.03	1471.



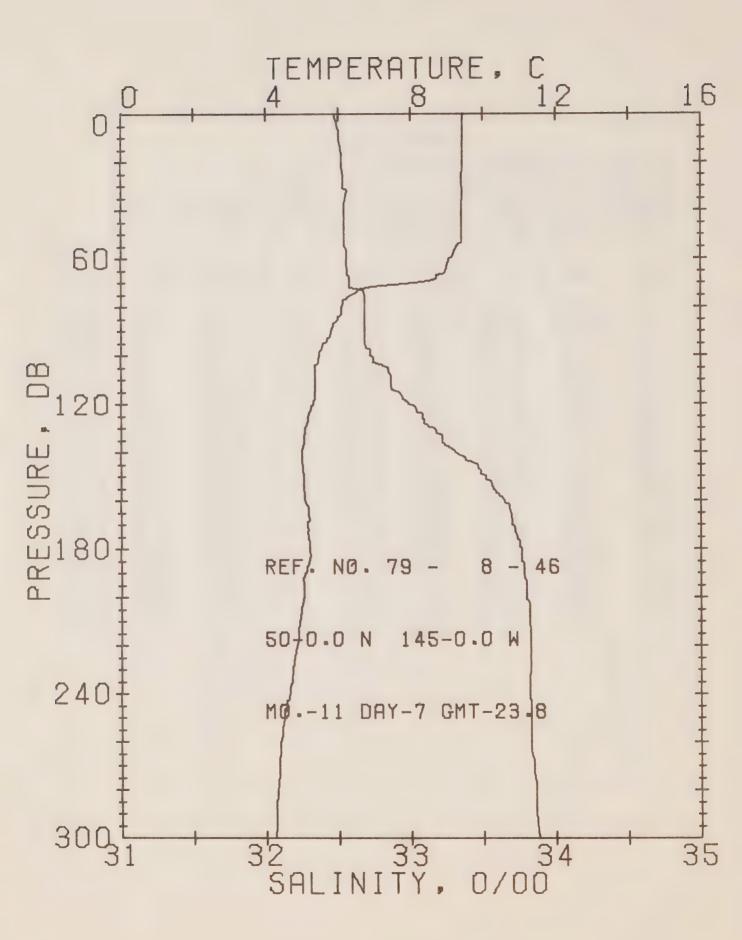
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 45 DATE 7/11/79
POSITION 50- .0N, 145- .0W GMT 17.2 STATION P
RESULTS OF STP CAST 184 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	9'.43	32.53	0	25.14	283.2	•00	.00	1485.
10	9.40	32.53	10	25.15	282.9	•28	.01	1485.
20	9.40	32.53	20	25.15	283.1	•57	.06	1485.
30	9.40	32.53	30	25.15	283.2	•85	.13	1485.
40	9.40	32.53	40	25.15	283.4	1.13	.23	1486.
50	9.40	32.53	50	25.15	283.6	1.42	• 36	1486.
60	9.02	32.55	60	25.22	276.5	1.70	•52	1485.
70	7.44	32.64	70	25.53	247.6	1.96	•69	1479.
80	6.38	32.67	80	25.69	232.0	2.20	.88	1475.
90	5.87	32.67	89	25.76	225.5	2.43	1.07	1473.
100	5.56	32.73	99	25.84	218.0	2.65	1.29	1472.
110	5.26	32.93	109	26.03	199.8	2.86	1.51	1471.
120	5.05	33.09	119	26.19	185.1	3.05	1.74	1471.
130	4.93	33.26	129	26.33	171.6	3.23	1.97	1471.
140	4.87	33.38	139	26.43	162.1	3.40	2.19	1471.
150	4.91	33.50	149	26.52	153.6	3.55	2.43	1471.
160	5.02	33.58	159	26.57	149.0	3.71	2.67	1472.
170	5.10	33.68	169	26.64	142.5	3.85	2.91	1472.
180	5.05	33.75	179	26.70	136.8	3.99	3.16	1472.
190	5.13	33.80	189	26.73	134.5	4.13	3.41	1473.
200	5.05	33.80	199	26.74	133.2	4.26	3.68	1473.
210	4.94	33.80	209	26.76	131.8	4.39	3.96	1473.
220	4.87	33.82	218	26.78	130.0	4.52	4.24	1472.
230	4.76	33.83	228	26.80	128.1	4.65	4.54	1472.
240	4.62	33.83	238	26.81	126.7	4.78	4.84	1472.
250	4.52	33.83	248	26.82	125.7	4.90	5.16	1472.
260	4.30	33.82	258	26.84	124.2	5.03	5.48	1471.
270	4.14	33.83	268	26.86	121.8	5.15	5.82	1470.
280	4.23	33.84	278	26.86	122.1	5.28	6.16	1471.
290	4.19	33.85	288	26.88	120.8	5.40	6.51	1471.
300	4.17	33.86	298	26.89	120.1	5.52	6.88	1471.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 45 DATE 7/11/79
POSITION 50- .0N, 145- .0W GMT 17.2 STATION P
RESULTS OF STP CAST 267 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	9.43	32.53	0	25.14	283.2	•00	•00	1485.
10	9.40	32.53	10	25.15	282.9	•28	.01	1485.
20	9.40	32.53	20	25.15	283.1	•57	.06	1485.
30	9.40	32.53	30	25.15	283.2	•85	•13	1485.
50	9.40	32.53	50	25.15	283.6	1.42	•36	1486.
75	6.83	32.65	75	25.62	239.0	2.08	.78	1477.
100	5.56	32.73	99	25.84	218.0	2.65	1.29	1472.
125	4.99	33.16	124	26.24	179.7	3.14	1.85	1471.
150	4.91	33.50	149	26.52	153.6	3.55	2.43	1471.
175	5.08	33.73	174	26.68	138.6	3.92	3.03	1473.
200	5.05	33.80	199	26.74	133.2	4.26	3.68	1473.
225	4.77	33.83	223	26.80	128.2	4.59	4.39	1472.
250	4.52	33.83	248	26.82	125.7	4.90	5.16	1472.
300	4.17	33.86	298	26.89	120.1	5.52	6.88	1471.
400	4.05	34.00	397	27.01	109.1	6.66	10.95	1472.
500	3.87	34.08	496	27.09	101.8	7.72	15.80	1473.
600	3'62	34.17	595	27.19	93.7	8.70	21.25	1474.
800	3,20	34.29	793	27.32	81.5	10.44	33.63	1476.
1000	2.88	34.37	990	27.42	73.1	11.99	47.84	1478.
1200	2.64	34.43	1188	27.48	67.7	13.40	63.60	1480.



OFFSHORE OCEANOGRAPHY GROUP

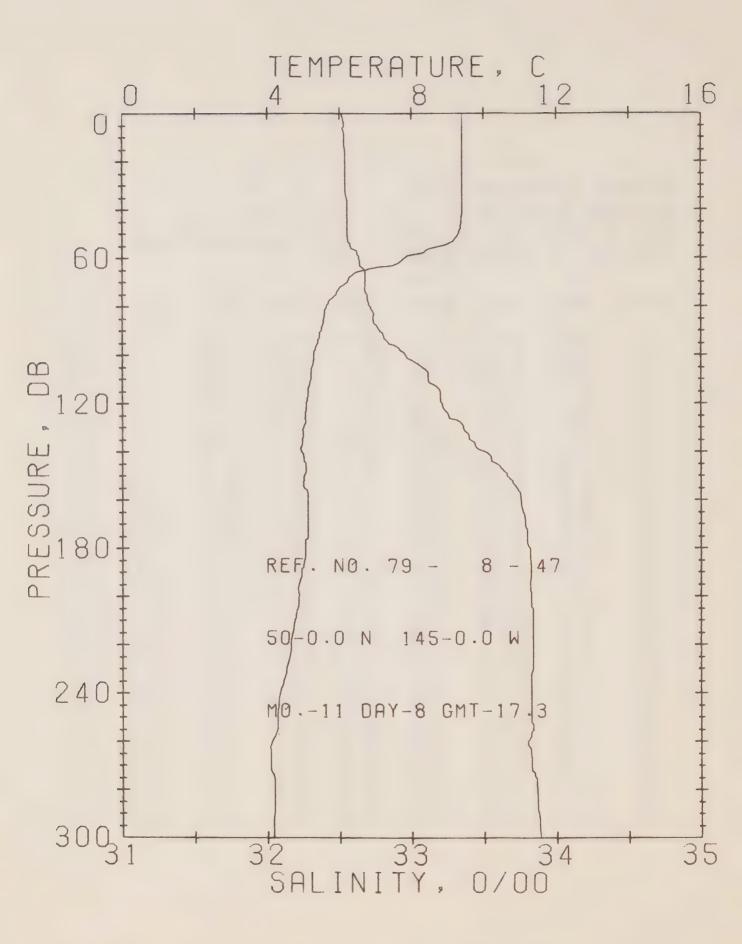
REFERENCE NO. 79- 8- 46 DATE 7/11/79

POSITION 50- .0N. 145- .0W GMT 23.8 STATION P

RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.45	32.47	0	25.09	287.9	•00	.00	1485.
10	9.45	32.50	10	25.12	285.9	.29	.01	1485.
20	9.43	32.52	20	25.13	284.3	•57	.06	1485.
30	9'.42	32.53	30	25.14	283.6	•86	.13	1486.
40	9.41	32.54	40	25.15	282.8	1.14	•23	1486.
50	9.41	32.54	50	25.15	283.0	1.42	• 36	1486.
60	9.07	32.55	60	25.21	277.3	1.70	•52	1485.
70	8.12	32.57	70	25.37	262.2	1.98	•70	1481.
80	6.09	32.68	80	25.73	227.7	2.21	.88	1474.
90	5.78	32.68	89	25.77	224.2	2.44	1.08	1473.
100	5.46	32.72	99	25.84	217.6	2.66	1.29	1471.
110	5.35	32.86	109	25.96	206.0	2.87	1.51	1471.
120	5.31	32.99	119	26.07	195.9	3.07	1.75	1472.
130	5.06	33.16	129	26.23	180.5	3.26	1.99	1471.
140	4.98	33.31	139	26.36	168.5	3.43	2.23	1471.
150	5.04	33.52	149	26.52	153.6	3.59	2.47	1472.
160	5.08	33.64	159	26.61	145.2	3.74	2.71	1472.
170	5.14	33.70	169	26.65	141.5	3.89	2.95	1473.
180	5.20	33.77	179	26.70	137.0	4.03	3.19	1473.
190	5.06	33.78	189	26.72	134.8	4.16	3.45	1473.
200	5.03	33.80	199	26.74	133.1	4.30	3.72	1473.
210	4.91	33.82	209	20.77	130.3	4.43	3.99	1472.
220	4.83	33.83	218	26.79	128.8	4.56	4.27	1472.
230	4.72	33.83	228	26.80	127.7	4.68	4.57	1472.
240	4.63	33.82	238	26.80	127.6	4.81	4.87	1472.
250	4.47	33.83	248	26.83	125.1	4.94	5.19	1471.
260	4.38	33.83	258	26.84	124.3	5.06	5.51	1471.
270	4.34	33.85	268	26.86	122.4	5.19	5.85	1471.
280	4.29	33.86	278	26.87	121.2	5.31	6.19	1471.
290	4.27	33.86	288	26.88	120.9	5.43	6.54	1471.
300	4.23	33.88	298	26.90	119.3	5.55	6.90	1471.



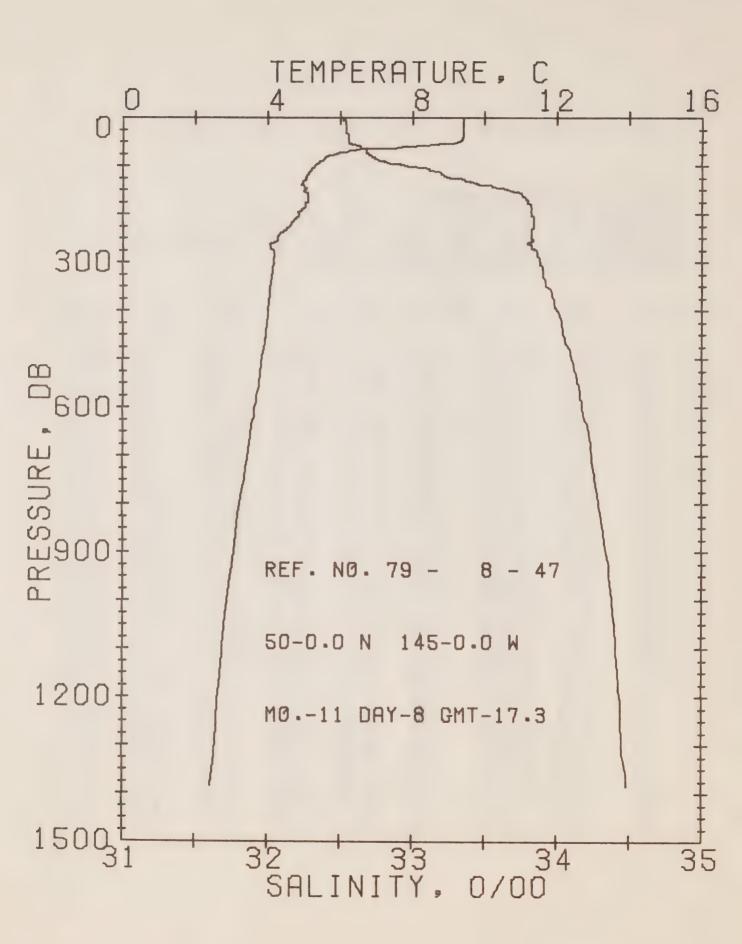
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 47 DATE 8/11/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

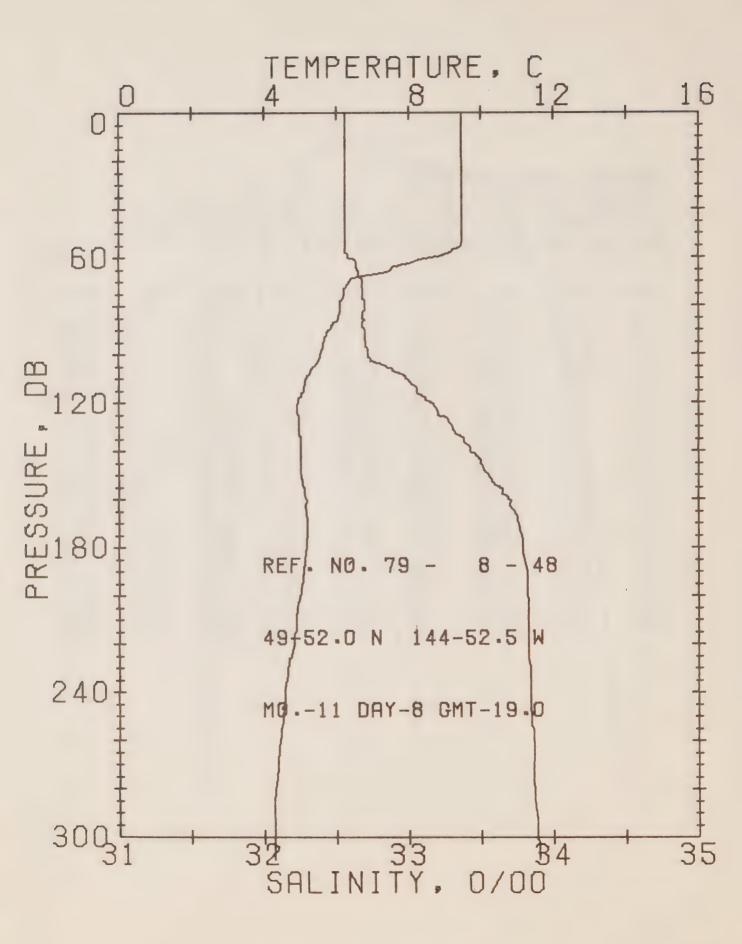
RESULTS OF STP CAST 204 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.41	32.51	0	25.13	284.3	•00	•00	1485.
10	9.41	32.53	10	25.15	283.0	•28	• 01	1485.
20	9.41	32.54	20	25.15	282.5	•57	•06	1485.
30	9'.41	32.54	30	25.15	282.7	•85	.13	1486.
40	9.41	32.55	40	25.16	282.1	1.13	•23	1486.
50	9.31	32.55	50	25.18	280.7	1.41	• 36	1486.
60	7.82	32.63	60	25.46	253.4	1.68	•51	1480.
70	6.21	32.68	70	25.72	229.0	1.92	.67	1474.
80	5.62	32.71	80	25.82	220.0	2.15	.84	1472.
90	5.48	32.78	89	25.89	213.3	2.36	1.03	1471.
100	5.29	32.96	99	26.05	197.8	2.57	1.23	1471.
110	5.19	33.11	109	26.18	185.5	2.76	1.43	1471.
120	5.08	33.21	119	26.27	176.9	2.94	1.64	1471.
130	4.98	33.36	129	26.40	164.7	3.11	1.86	1471.
140	4.94	33.51	139	26.53	153.1	3.27	2.08	1471.
150	5.02	33.66	149	26.63	142.9	3.42	2.30	1472.
160	5.12	33.76	159	26.70	137.1	3.56	2.52	1472.
170	5.13	33.79	169	26.72	134.6	3.69	2.75	1473.
180	5.03	33.82	179	26.76	131.4	3.83	2.98	1472.
190	4.93	33.83	189	26.78	129.6	3.96	3.23	1472.
200	4.87	33.83	199	26.79	129.0	4.09	3.49	1472.
210	4.75	33.84	209	26.81	127.1	4.21	3.76	1472.
220	4.64	33.84	218	26.82	126.0	4.34	4.03	1472.
230	4.51	33.84	228	26.83	124.6	4.47	4.32	1471.
240	4.33	33.83	238	26.84	123.5	4.59	4.62	1471.
250	4.27	33.83	248	26.85	123.0	4.71	4.93	1470.
260	4.10	33.80	258	26.85	123.6	4.84	5.25	1470.
270	4.08	33.83	268	26.87	121.2	4.96	5.57	1470.
280	4.20	33.86	278	26.89	120.0	5.08	5.91	1471.
290	4.18	33.87	288	26.90	119.0	5.20	6.26	1471.
300	4.17	33.89	298	26.91	117.9	5.32	6.62	1471.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 47 DATE 8/11/79
POSITION 50- .0N, 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 297 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	9.41	32.51	0	25.13	284.3	•00	•00	1485.
10	9.41	32.53	10	25.15	283.0	•28	.01	1485.
20	9.41	32.54	20	25.15	282.5	•57	.06	1485.
30	9.41	32.54	30	25.15	282.7	•85	•13	1486.
50	9.31	32.55	50	25.18	280.7	1.41	•36	1486.
75	5.89	32.69	75	25.77	224.6	2.03	.75	1473.
100	5.29	32.96	99	26.05	197.8	2.57	1.23	1471.
125	5.05	33.26	124	26.31	173.2	3.03	1.75	1471.
150	5.02	33.66	149	26.63	142.9	3.42	2.30	1472.
175	5.13	33.80	174	26.73	133.9	3.76	2.86	1473.
200	4.87	33.83	199	26.79	129.0	4.09	3.49	1472.
225	4.60	33.84	223	26.82	125.5	4.40	4.18	1471.
250	4.27	33.83	248	26.85	123.0	4.71	4.93	1470.
300	4.17	33.89	298	26.91	117.9	5.32	6.62	1471.
400	3.99	34.00	397	27.01	108.8	6.45	10.66	1472.
500	3.84	34.10	496	27.11	100.5	7.50	15.46	1473.
600	3.65	34.17	595	27.18	93.9	8.47	20.88	1474.
800	3.23	34.29	793	27.32	81.9	10.22	33.32	1476.
1000	2.88	34.38	990	27.42	72.8	11.76	47.41	1478.
1200	2.63	34.44	1188	27.49	67.1	13.15	63.04	1480.



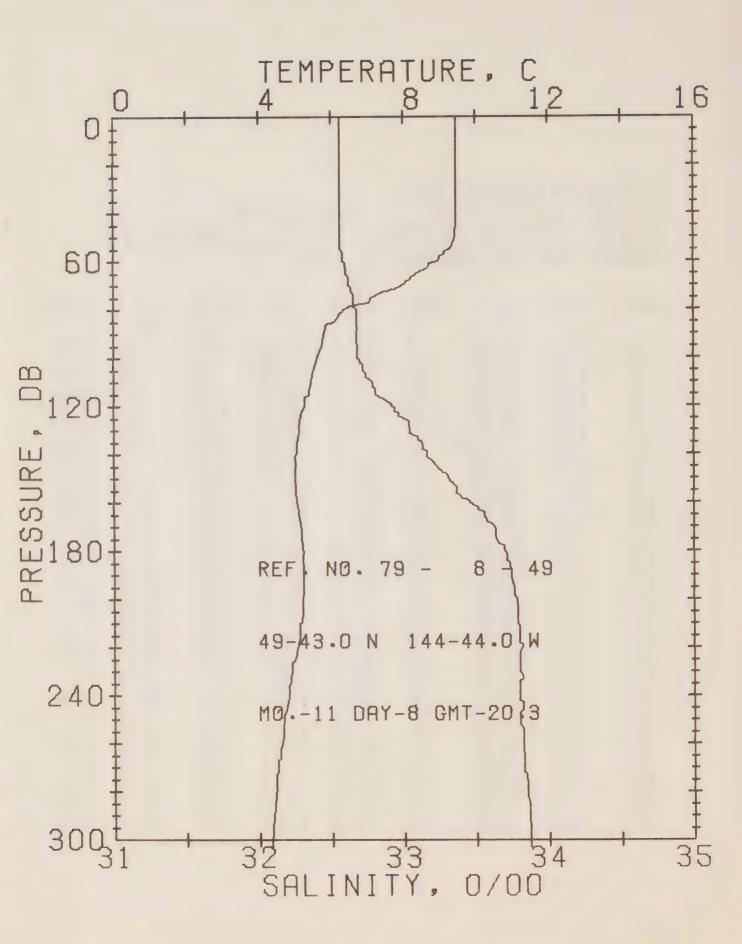
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 48 DATE 8/11/79

POSITION 49-52.0N, 144-52.0W GMT 19.0 STATION E3

RESULTS OF STP CAST 168 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
0	9.46	32.56	0	25.16	281.4	•00	• 00	1485.
10	9.47	32.56	10	25.16	281.7	•28	•01	1485.
20	9.48	32.56	20	25.16	282.1	•56	•06	1486.
30	9.48	32.56	30	25.16	282.2	•85	.13	1486.
40	9.48	32.56	40	25.16	282.4	1.13	.23	1486.
50	9.49	32.56	50	25.16	282.7	1.41	• 36	1486.
60	8.58	32.58	60	25.31	267.8	1.69	•52	1483.
70	6.36	32.68	70	25.70	230.9	1.94	•68	1475.
80	6.12	32.69	80	25.74	227.3	2.17	•86	1474.
90	5.78	32.69	89	25.78	223.4	2.39	1.05	1473.
100	5.55	32.71	99	25.82	219.4	2.61	1.27	1472.
110	5.15	32.98	109	26.08	194.8	2.82	1.49	1471.
120	4.93	33.15	119	26.24	179.8	3.01	1.71	1470.
130	4.96	33.30	129	26.36	169.0	3.18	1.93	1471.
140	5.00	33.43	139	26.46	159.8	3.35	2.16	1471.
150	5.03	33.55	149	26.55	151.2	3.50	2.38	1472.
160	5.16	33.69	159	26.64	142.3	3.65	2.62	1473.
170	5.19	33.76	169	26.69	137.9	3.79	2.85	1473.
180	5.16	33.79	179	26.72	135.1	3.93	3.09	1473.
190	5.10	33.82	189	26.75	132.3	4.06	3.35	1473.
200	4.99	33.82	199	26.76	131.1	4.19	3.61	1473.
210	4.89	33.83	209	26.78	129.4	4.32	3.88	1472.
220	4.84	33.83	218	26.79	128.9	4.45	4.16	1472.
230	4.65	33.84	228	26.82	126.2	4.58	4.46	1472.
240	4.56	33.84	238	26.83	125.3	4.70	4.76	1472.
250	4.51	33.85	248	26.84	124.1	4.83	5.07	1472.
260	4.43	33.86	258	26.86	122.3	4.95	5.39	1471.
270	4.37	33.86	268	26.87	121.8	5.07	5.72	1471.
280	4.29	33.87	278	26.88	120.5	5.20	6.06	1471.
290	4.27	33.88	288	26.89	119.7	5.32	6.41	1471.
300	4.28	33.89	298	26.90	119.1	5.44	6.77	1471.



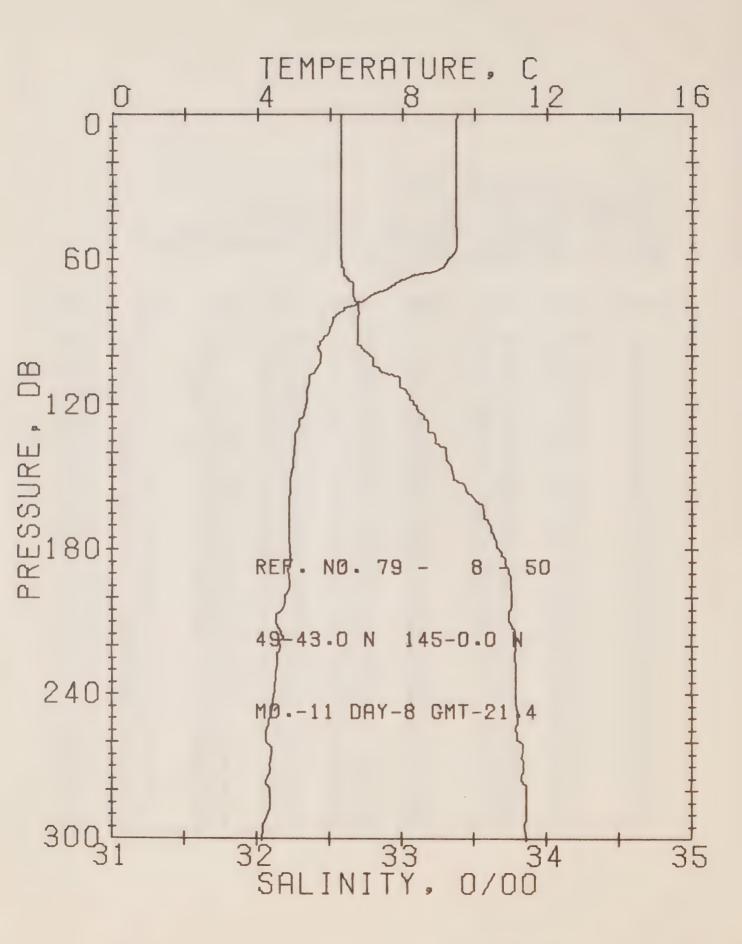
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 49 DATE 8/11/79

POSITION 49-43.0N, 144-44.0W GMT 20.3 STATION E4

RESULTS OF STP CAST 193 ROINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	9.46	32.56	0	25.16	281.4	•00	•00	1485.
10	9.47	32.56	10	25.16	281.7	•28	.01	1485.
20	9.47	32.56	20	25.16	281.9	•56	.06	1486.
30	9.47	32.56	30	25.16	282.0	•85	.13	1486.
40	9.47	32.56	40	25.16	282.3	1.13	.23	1486.
50	9.43	32.56	50	25.17	281.8	1.41	•36	1486.
60	8.96	32.58	60	25.25	273.4	1.69	•52	1484.
70	7.95	32.62	70	25.44	256.1	1.95	•69	1481.
80	6.36	32.67	80	25.69	231.7	2.20	.88	1475.
90	5.78	32.67	89	25.76	224.9	2.42	1.07	1473.
100	5.60	32.68	99	25.79	222.2	2.65	1.29	1472.
110	5.44	32.78	109	25.89	213.0	2.86	1.52	1472.
120	5.24	32.92	119	26.02	200.4	3.07	1.77	1471.
130	5.12	33.04	129	26.13	190.2	3.27	2.01	1471.
140	5.00	33.16	139	26.24	180.0	3.45	2.27	1471.
150	4.98	33.31	149	26.36	168.6	3.63	2.53	1471.
160	5.05	33.46	159	26.47	158.3	3.79	2.79	1472.
170	5.15	33.62	169	26.59	147.6	3.94	3.04	1473.
180	5.22	33.70	179	26.64	142.5	4.09	3.30	1473.
190	5.23	33.74	189	26.67	139.7	4.23	3.57	1473.
200	5.20	33.78	199	26.71	136.5	4.37	3.84	1473.
210	5.13	33.79	209	26.72	135.0	4.50	4.13	1473.
220	5.05	33.82	218	26.76	132.0	4.64	4.42	1473.
230	4.87	33.80	228	26.76	131.6	4.77	4.72	1473.
240	4.79	33.80	238	26.77	130.8	4.90	5.04	1472.
250	4.67	33.80	248	26.78	129.6	5.03	5.36	1472.
260	4.60	33.82	258	26.81	127.4	5.16	5.69	1472.
270	4.50	33.83	268	26.83	125.6	5.28	6.03	1472.
280	4.44	33.85	278	26.85	123.6	5.41	6.38	1472.
290	4.37	33.86	288	26.86	122.1	5.53	6.74	1472.
300	4.32	33.87	298	26.88	121.0	5.65	7.10	1472.



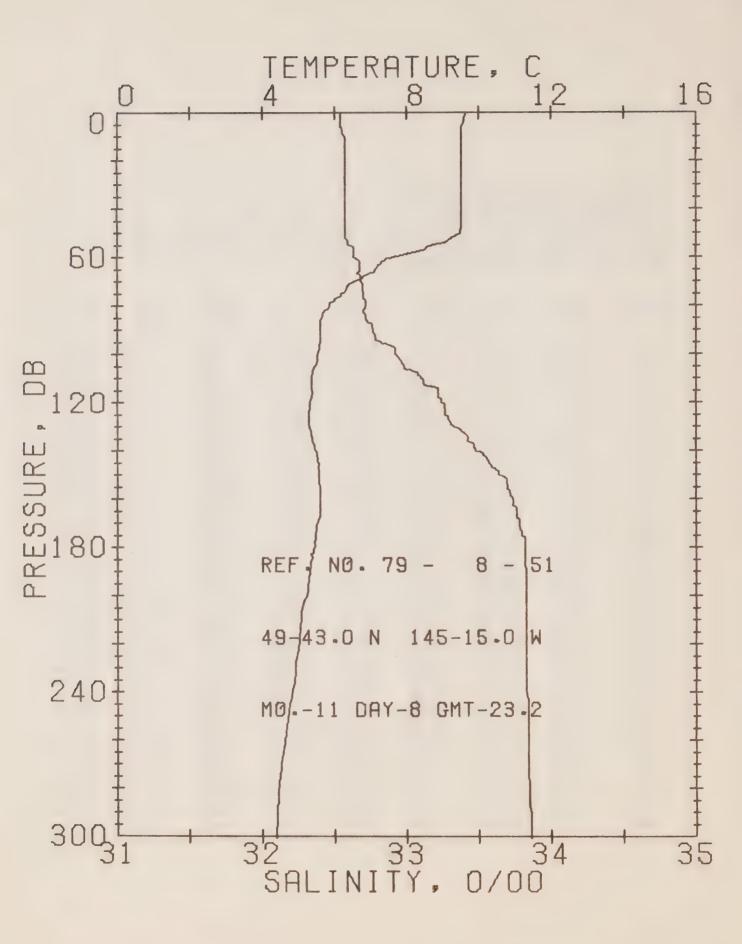
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 50 DATE 8/11/79

POSITION 49-42-0N, 145- ,0W GMT 21.4 STATION C1

RESULTS OF STP CAST 203 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

0         9.51         32.57         0         25.16         281.4         .00         .00         1485.           10         9.49         32.57         10         25.16         281.3         .28         .01         1486.           20         9.49         32.57         20         25.16         281.7         .84         .13         1486.           30         9.49         32.57         40         25.16         281.7         .84         .13         1486.           40         9.50         32.57         40         25.16         282.3         1.41         .36         1486.           50         9.51         32.57         50         25.16         282.3         1.41         .36         1486.           60         9.29         32.57         60         25.20         279.1         1.69         .52         1486.           60         9.29         32.57         60         25.20         279.1         1.69         .69         1480.           80         6.41         32.69         80         25.76         225.7         2.43         1.08         1473.           100         5.77         32.78         99 <t< th=""><th>PRESS</th><th>TEMP</th><th>SAL</th><th>DEPTH</th><th>SIGMA</th><th>SVA</th><th>DELTA</th><th>POT.</th><th>SOUND</th></t<>	PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
10       9.49       32.57       10       25.16       281.3       .28       .01       1486.         20       9.49       32.57       20       25.16       281.5       .56       .06       1486.         30       9.49       32.57       30       25.16       281.7       .84       .13       1486.         40       9.50       32.57       40       25.16       282.0       1.13       .23       1486.         50       9.51       32.57       50       25.16       282.3       1.41       .36       1486.         60       9.29       32.57       60       25.20       279.1       1.69       .52       1486.         60       9.29       32.57       60       25.20       279.1       1.69       .52       1486.         70       7.82       32.66       70       25.49       251.3       1.96       .69       1480.         80       6.41       32.69       80       25.70       230.8       2.20       .88       1475.         90       5.97       32.69       89       25.76       225.7       2.43       1.08       1475.         100       5.73 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>D</td><td>EN</td><td></td></t<>							D	EN	
20       9.49       32.57       20       25.16       281.5       .84       .13       1486.         30       9.49       32.57       30       25.16       281.7       .84       .13       1486.         40       9.50       32.57       40       25.16       282.0       1.13       .23       1486.         50       9.51       32.57       50       25.16       282.3       1.41       .36       1486.         60       9.29       32.57       60       25.20       279.1       1.69       .52       1486.         70       7.82       32.66       70       25.49       251.3       1.96       .69       1480.         80       6.41       32.69       80       25.70       230.8       2.20       .88       1475.         90       5.97       32.69       89       25.76       225.7       2.43       1.08       1473.         100       5.77       32.78       99       25.85       216.7       2.65       1.29       1473.         110       5.34       33.08       119       26.05       197.9       2.86       1.52       1472.         120       5.34				0	25.16	281.4	•00	.00	1485.
30       9.49       32.57       30       25.16       281.7       .84       .13       1486.         40       9.50       32.57       40       25.16       282.0       1.13       .23       1486.         50       9.51       32.57       50       25.16       282.3       1.41       .36       1486.         60       9.29       32.57       60       25.20       279.1       1.69       .52       1486.         70       7.82       32.66       70       25.49       251.3       1.96       .69       1480.         80       6.41       32.69       80       25.70       230.8       2.20       .88       1475.         90       5.97       32.69       89       25.76       225.7       2.43       1.08       1473.         100       5.77       32.78       99       25.85       216.7       2.65       1.29       1473.         110       5.43       33.08       119       26.05       197.9       2.86       1.52       1472.         130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471.         140       5.00 <td></td> <td></td> <td></td> <td></td> <td></td> <td>281.3</td> <td>•28</td> <td>.01</td> <td>1486.</td>						281.3	•28	.01	1486.
40       9.50       32.57       40       25.16       282.0       1.13       .23       1486.         50       9.51       32.57       50       25.16       282.3       1.41       .36       1486.         60       9.29       32.57       60       25.20       279.1       1.69       .52       1486.         70       7.82       32.66       70       25.49       251.3       1.96       .69       1480.         80       6.41       32.69       80       25.70       230.8       2.20       .88       1475.         90       5.97       32.69       89       25.76       225.7       2.43       1.08       1473.         100       5.77       32.78       99       25.85       216.7       2.65       1.29       1473.         110       5.43       33.08       119       26.05       197.9       2.86       1.52       1472.         120       5.34       33.08       119       26.14       189.5       3.05       1.74       1472.         130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471.         140       5.00				20	25.16	281.5	•56	•06	1486.
50       9.51       32.57       50       25.16       282.3       1.41       .36       1486.         60       9.29       32.57       60       25.20       279.1       1.69       .52       1486.         70       76.82       32.66       70       25.49       251.3       1.96       .69       1480.         80       6.41       32.69       80       25.70       230.8       2.20       .88       1475.         90       5.97       32.69       89       25.76       225.7       2.43       1.08       1473.         100       5.77       32.78       99       25.85       216.7       2.65       1.29       1473.         110       5.43       32.98       109       26.05       197.9       2.86       1.52       1472.         120       5.34       33.08       119       26.14       189.5       3.05       1.74       1472.         130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471.         140       5.00       33.30       139       26.35       169.3       3.41       2.22       1471.         150	30	9.49	32.57	30	25.16	281.7	•84	•13	1486.
60       9.29       32.57       60       25.20       279.1       1.69       .52       1486.         70       7.82       32.66       70       25.49       251.3       1.96       .69       1480.         80       6.41       32.69       80       25.70       230.8       2.20       .88       1475.         90       5.97       32.69       89       25.76       225.7       2.43       1.08       1473.         100       5.77       32.78       99       25.85       216.7       2.65       1.29       1473.         110       5.43       32.98       109       26.05       197.9       2.86       1.52       1472.         120       5.34       33.08       119       26.14       189.5       3.05       1.74       1472.         130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471.         140       5.00       33.30       139       26.35       169.3       3.41       2.22       1471.         150       46.93       33.51       159       26.53       152.8       3.74       2.71       1471.         160       <	40	9.50	32.57	40		282.0	1.13	•23	1486.
70       7.82       32.66       70       25.49       251.3       1.96       .69       1480         80       6.41       32.69       80       25.70       230.8       2.20       .88       1475         90       5.97       32.69       89       25.76       225.7       2.43       1.08       1473         100       5.77       32.78       99       25.85       216.7       2.65       1.29       1473         110       5.43       32.98       109       26.05       197.9       2.86       1.52       1472         120       5.34       33.08       119       26.61       189.5       3.05       1.74       1472         130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471         140       5.00       33.30       139       26.35       169.3       3.41       2.22       1471         150       4.93       33.36       149       26.41       164.5       3.58       2.46       1471         160       4.89       33.51       159       26.53       152.8       3.74       2.71       1471         170       4.88<	50		32.57	50	25.16	282.3	1.41	• 36	1486.
80       6.41       32.69       80       25.70       230.8       2.20       .88       1475.         90       5.97       32.69       89       25.76       225.7       2.43       1.08       1473.         100       5.77       32.78       99       25.85       216.7       2.65       1.29       1473.         110       5.43       32.98       109       26.05       197.9       2.86       1.52       1472.         120       5.34       33.08       119       26.14       189.5       3.05       1.74       1472.         130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471.         140       5.00       33.30       139       26.35       169.3       3.41       2.22       1471.         150       4.93       33.36       149       26.41       164.5       3.58       2.46       1471.         160       4.89       33.51       159       26.53       152.8       3.74       2.71       1471.         170       4.88       33.61       169       26.61       145.7       3.89       2.96       1471.         180				60			1.69	•52	1486.
90       5.97       32.69       89       25.76       225.7       2.43       1.08       1473.         100       5.77       32.78       99       25.85       216.7       2.65       1.29       1473.         110       5.43       32.98       109       26.05       197.9       2.86       1.52       1472.         120       5.34       33.08       119       26.14       189.5       3.05       1.74       1472.         130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471.         140       5.00       33.30       139       26.35       169.3       3.41       2.22       1471.         150       4.93       33.36       149       26.41       164.5       3.58       2.46       1471.         160       4.89       33.51       159       26.53       152.8       3.74       2.71       1471.         170       4.88       33.61       169       26.61       145.7       3.89       2.96       1471.         180       4.92       33.67       179       26.65       141.3       4.03       3.22       1472.         190								•69	1480.
100       5.77       32.78       99       25.85       216.7       2.65       1.29       1473.         110       5.43       32.98       109       26.05       197.9       2.86       1.52       1472.         120       5.34       33.08       119       26.14       189.5       3.05       1.74       1472.         130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471.         140       5.00       33.30       139       26.35       169.3       3.41       2.22       1471.         150       4.93       33.36       149       26.41       164.5       3.58       2.46       1471.         160       4.89       33.51       159       26.53       152.8       3.74       2.71       1471.         170       4.88       33.61       169       26.61       145.7       3.89       2.96       1471.         180       4.92       33.67       179       26.65       141.3       4.03       3.22       1472.         190       4.88       33.74       189       26.71       135.8       4.17       3.48       1472.         210 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.20</td> <td>•88</td> <td>1475.</td>							2.20	•88	1475.
110       5.43       32.98       109       26.05       197.9       2.86       1.52       1472.         120       5.34       33.08       119       26.14       189.5       3.05       1.74       1472.         130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471.         140       5.00       33.30       139       26.35       169.3       3.41       2.22       1471.         150       4.93       33.36       149       26.41       164.5       3.58       2.46       1471.         160       4.89       33.51       159       26.53       152.8       3.74       2.71       1471.         170       4.88       33.61       169       26.61       145.7       3.89       2.96       1471.         180       4.92       33.67       179       26.65       141.3       4.03       3.22       1472.         190       4.88       33.74       189       26.71       135.8       4.17       3.48       1472.         200       4.77       33.76       199       26.74       133.2       4.30       3.75       1472.         210 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.43</td> <td>1.08</td> <td>1473.</td>							2.43	1.08	1473.
120       5.34       33.08       119       26.14       189.5       3.05       1.74       1472.         130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471.         140       5.00       33.30       139       26.35       169.3       3.41       2.22       1471.         150       4.93       33.36       149       26.41       164.5       3.58       2.46       1471.         160       4.89       33.51       159       26.53       152.8       3.74       2.71       1471.         170       4.88       33.61       169       26.61       145.7       3.89       2.96       1471.         180       4.92       33.67       179       26.65       141.3       4.03       3.22       1472.         190       4.88       33.74       189       26.71       135.8       4.17       3.48       1472.         200       4.77       33.76       199       26.74       133.2       4.30       3.75       1472.         210       4.52       33.79       218       26.78       129.6       4.57       4.31       1471.         230 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2.65</td> <td>1.29</td> <td></td>							2.65	1.29	
130       5.12       33.18       129       26.24       179.7       3.24       1.98       1471.         140       5.00       33.30       139       26.35       169.3       3.41       2.22       1471.         150       4.93       33.36       149       26.41       164.5       3.58       2.46       1471.         160       4.89       33.51       159       26.53       152.8       3.74       2.71       1471.         170       4.88       33.61       169       26.61       145.7       3.89       2.96       1471.         180       4.92       33.67       179       26.65       141.3       4.03       3.22       1472.         190       4.88       33.74       189       26.71       135.8       4.17       3.48       1472.         200       4.77       33.76       199       26.74       133.2       4.30       3.75       1472.         210       4.52       33.74       209       26.75       132.0       4.43       4.02       1471.         220       4.63       33.79       218       26.78       129.6       4.57       4.31       1471.         240 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>197.9</td> <td></td> <td>1.52</td> <td>1472.</td>						197.9		1.52	1472.
140       5.00       33.30       139       26.35       169.3       3.41       2.22       1471.         150       4.93       33.36       149       26.41       164.5       3.58       2.46       1471.         160       4.89       33.51       159       26.53       152.8       3.74       2.71       1471.         170       4.88       33.61       169       26.61       145.7       3.89       2.96       1471.         180       4.92       33.67       179       26.65       141.3       4.03       3.22       1472.         190       4.88       33.74       189       26.71       135.8       4.17       3.48       1472.         200       4.77       33.76       199       26.74       133.2       4.30       3.75       1472.         210       4.52       33.74       209       26.75       132.0       4.43       4.02       1471.         220       4.63       33.79       218       26.78       129.6       4.57       4.31       1471.         230       4.52       33.79       228       26.79       128.5       4.69       4.61       1471.         240 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>189.5</td> <td>3.05</td> <td>1.74</td> <td>1472.</td>						189.5	3.05	1.74	1472.
150       4'.93       33.36       149       26.41       164.5       3.58       2.46       1471.         160       4'.89       33.51       159       26.53       152.8       3.74       2.71       1471.         170       4.88       33.61       169       26.61       145.7       3.89       2.96       1471.         180       4.92       33.67       179       26.65       141.3       4.03       3.22       1472.         190       4.88       33.74       189       26.71       135.8       4.17       3.48       1472.         200       4.77       33.76       199       26.74       133.2       4.30       3.75       1472.         210       4.52       33.74       209       26.75       132.0       4.43       4.02       1471.         220       4.63       33.79       218       26.78       129.6       4.57       4.31       1471.         230       4.52       33.79       228       26.79       128.5       4.69       4.61       1471.         250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260					26.24	179.7	3.24	1.98	1471.
160       4.89       33.51       159       26.53       152.8       3.74       2.71       1471.         170       4.88       33.61       169       26.61       145.7       3.89       2.96       1471.         180       4.92       33.67       179       26.65       141.3       4.03       3.22       1472.         190       4.88       33.74       189       26.71       135.8       4.17       3.48       1472.         200       4.77       33.76       199       26.74       133.2       4.30       3.75       1472.         210       4.52       33.74       209       26.75       132.0       4.43       4.02       1471.         220       4.63       33.79       218       26.78       129.6       4.57       4.31       1471.         230       4.52       33.79       218       26.79       128.5       4.69       4.61       1471.         240       4.45       33.79       238       26.80       127.8       4.82       4.91       1471.         250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260 </td <td></td> <td></td> <td></td> <td></td> <td>26.35</td> <td>169.3</td> <td>3.41</td> <td>2.22</td> <td>1471.</td>					26.35	169.3	3.41	2.22	1471.
170       4.88       33.61       169       26.61       145.7       3.89       2.96       1471.         180       4.92       33.67       179       26.65       141.3       4.03       3.22       1472.         190       4.88       33.74       189       26.71       135.8       4.17       3.48       1472.         200       4.77       33.76       199       26.74       133.2       4.30       3.75       1472.         210       4.52       33.74       209       26.75       132.0       4.43       4.02       1471.         220       4.63       33.79       218       26.78       129.6       4.57       4.31       1471.         230       4.52       33.79       228       26.79       128.5       4.69       4.61       1471.         240       4.45       33.79       238       26.80       127.8       4.82       4.91       1471.         250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260       4.26       33.82       258       26.84       123.7       5.08       5.56       1471.         270 </td <td></td> <td></td> <td></td> <td>149</td> <td>26.41</td> <td>164.5</td> <td>3.58</td> <td>2.46</td> <td>1471.</td>				149	26.41	164.5	3.58	2.46	1471.
180       4.92       33.67       179       26.65       141.3       4.03       3.22       1472.         190       4.88       33.74       189       26.71       135.8       4.17       3.48       1472.         200       4.77       33.76       199       26.74       133.2       4.30       3.75       1472.         210       4.52       33.74       209       26.75       132.0       4.43       4.02       1471.         220       4.63       33.79       218       26.78       129.6       4.57       4.31       1471.         230       4.52       33.79       228       26.79       128.5       4.69       4.61       1471.         240       4.45       33.79       238       26.80       127.8       4.82       4.91       1471.         250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260       4.26       33.82       258       26.84       123.7       5.08       5.56       1471.         270       4.36       33.84       268       26.87       121.9       5.32       6.24       1471.         280 </td <td></td> <td>4.89</td> <td>33.51</td> <td>159</td> <td>26.53</td> <td>152.8</td> <td>3.74</td> <td>2.71</td> <td>1471.</td>		4.89	33.51	159	26.53	152.8	3.74	2.71	1471.
190       4.88       33.74       189       26.71       135.8       4.17       3.48       1472.         200       4.77       33.76       199       26.74       133.2       4.30       3.75       1472.         210       4.52       33.74       209       26.75       132.0       4.43       4.02       1471.         220       4.63       33.79       218       26.78       129.6       4.57       4.31       1471.         230       4.52       33.79       228       26.79       128.5       4.69       4.61       1471.         240       4.45       33.79       238       26.80       127.8       4.82       4.91       1471.         250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260       4.26       33.82       258       26.84       123.7       5.08       5.56       1471.         270       4.36       33.84       268       26.85       123.3       5.20       5.89       1471.         280       4.35       33.86       278       26.87       121.9       5.32       6.24       1471.         290 </td <td></td> <td>4.88</td> <td>33.61</td> <td>169</td> <td>26.61</td> <td>145.7</td> <td>3.89</td> <td>2.96</td> <td>1471.</td>		4.88	33.61	169	26.61	145.7	3.89	2.96	1471.
200       4.77       33.76       199       26.74       133.2       4.30       3.75       1472.         210       4.52       33.74       209       26.75       132.0       4.43       4.02       1471.         220       4.63       33.79       218       26.78       129.6       4.57       4.31       1471.         230       4.52       33.79       228       26.79       128.5       4.69       4.61       1471.         240       4.45       33.79       238       26.80       127.8       4.82       4.91       1471.         250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260       4.26       33.82       258       26.84       123.7       5.08       5.56       1471.         270       4.36       33.84       268       26.85       123.3       5.20       5.89       1471.         280       4.35       33.86       278       26.87       121.9       5.32       6.24       1471.         290       4.29       33.86       288       26.87       121.3       5.44       6.59       1471.		4.92	33.67	179	26.65	141.3	4.03	3.22	1472.
210       4.52       33.74       209       26.75       132.0       4.43       4.02       1471.         220       4.63       33.79       218       26.78       129.6       4.57       4.31       1471.         230       4.52       33.79       228       26.79       128.5       4.69       4.61       1471.         240       4.45       33.79       238       26.80       127.8       4.82       4.91       1471.         250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260       4.26       33.82       258       26.84       123.7       5.08       5.56       1471.         270       4.36       33.84       268       26.85       123.3       5.20       5.89       1471.         280       4.35       33.86       278       26.87       121.9       5.32       6.24       1471.         290       4.29       33.86       288       26.87       121.3       5.44       6.59       1471.	190	4.88	33.74	189	26.71	135.8	4.17	3.48	1472.
220       4.63       33.79       218       26.78       129.6       4.57       4.31       1471.         230       4.52       33.79       228       26.79       128.5       4.69       4.61       1471.         240       4.45       33.79       238       26.80       127.8       4.82       4.91       1471.         250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260       4.26       33.82       258       26.84       123.7       5.08       5.56       1471.         270       4.36       33.84       268       26.85       123.3       5.20       5.89       1471.         280       4.35       33.86       278       26.87       121.9       5.32       6.24       1471.         290       4.29       33.86       288       26.87       121.3       5.44       6.59       1471.	200	4.77	33.76	199	26.74	133.2	4.30	3.75	1472.
230       4.52       33.79       228       26.79       128.5       4.69       4.61       1471.         240       4.45       33.79       238       26.80       127.8       4.82       4.91       1471.         250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260       4.26       33.82       258       26.84       123.7       5.08       5.56       1471.         270       4.36       33.84       268       26.85       123.3       5.20       5.89       1471.         280       4.35       33.86       278       26.87       121.9       5.32       6.24       1471.         290       4.29       33.86       288       26.87       121.3       5.44       6.59       1471.	210	4.52		209	26.75	132.0	4.43	4.02	1471.
240       4.45       33.79       238       26.80       127.8       4.82       4.91       1471.         250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260       4.26       33.82       258       26.84       123.7       5.08       5.56       1471.         270       4.36       33.84       268       26.85       123.3       5.20       5.89       1471.         280       4.35       33.86       278       26.87       121.9       5.32       6.24       1471.         290       4.29       33.86       288       26.87       121.3       5.44       6.59       1471.	220	4.63	33.79	218	26.78	129.6	4.57	4.31	1471.
250       4.35       33.80       248       26.82       126.0       4.95       5.23       1471.         260       4.26       33.82       258       26.84       123.7       5.08       5.56       1471.         270       4.36       33.84       268       26.85       123.3       5.20       5.89       1471.         280       4.35       33.86       278       26.87       121.9       5.32       6.24       1471.         290       4.29       33.86       288       26.87       121.3       5.44       6.59       1471.		4.52	33.79	228	26.79	128.5	4.69	4.61	1471.
260       4.26       33.82       258       26.84       123.7       5.08       5.56       1471.         270       4.36       33.84       268       26.85       123.3       5.20       5.89       1471.         280       4.35       33.86       278       26.87       121.9       5.32       6.24       1471.         290       4.29       33.86       288       26.87       121.3       5.44       6.59       1471.	240	4.45	33.79	238	26.80	127.8	4.82	4.91	1471.
270     4.36     33.84     268     26.85     123.3     5.20     5.89     1471.       280     4.35     33.86     278     26.87     121.9     5.32     6.24     1471.       290     4.29     33.86     288     26.87     121.3     5.44     6.59     1471.	250	4.35	33.80	248	26.82	126.0	4.95	5.23	1471.
280 4.35 33.86 278 26.87 121.9 5.32 6.24 1471. 290 4.29 33.86 288 26.87 121.3 5.44 6.59 1471.	260	4.26	33.82	258	26.84	123.7	5.08	5.56	1471.
290 4.29 33.86 288 26.87 121.3 5.44 6.59 1471.	270	4.36	33.84	268	26.85	123.3	5.20	5.89	1471.
	280	4.35	. 33.86	278	26.87	121.9	5.32	6.24	1471.
300 4.14 33.86 298 26.89 119.8 5.56 6.95 1471.	290	4.29	33.86	288	26.87	121.3	5.44	6.59	1471.
	300	4.14	33.86	298	26.89	119.8	5.56	6.95	1471.



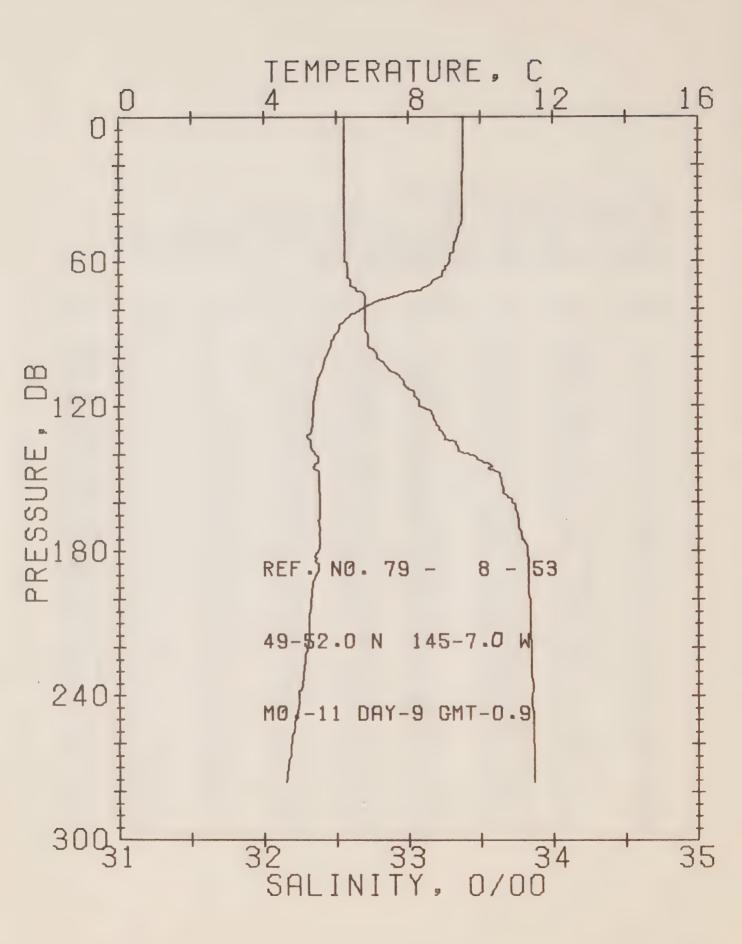
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 51 DATE 8/11/79

POSITION 49-43.0N, 145- 15,0W GMT 23.2 STATION W4

RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.63	32.54	0	25.12	285.5	•00	.00	1486.
10	9.52	32.56	10	25.15	282.6	•28	•01	1486.
20	9.52	32.57	20	25.16	281.9	•57	• 06	1486.
30	9.51	32.57	30	25.16	282.0	•85	.13	1486.
40	9.51	32.57	40	25.16	282.1	1.13	•23	1486.
50	9.50	32.57	50	25.16	282.2	1.41	• 36	1486.
60	7.60	32.63	60	25.50	250.4	1.68	•51	1479.
70	6.54	32.68	70	25.68	233.1	1.92	•67	1475.
80	5.87	32.72	80	25.79	222.1	2.15	.84	1473.
90	5.60	32.77	89	25.86	215.6	2.37	1.03	1472.
100	5.53	32.92	99	25.99	203.5	2.58	1.24	1472.
110	5.37	33.10	109	26.15	188.3	2.78	1.45	1472.
120	5.32	33.24	119	26.27	177.4	2.96	1.66	1472.
130	5.32	33.33	129	26.34	170.7	3.13	1.88	1472.
140	5.49	33.48	139	26.44	161.6	3.30	2.11	1473.
150	5.58	33.64	149	26.55	150.8	3.45	2.34	1474.
160	5.60	33.73	159	26.62	144.4	3.60	2.57	1474.
170	5.53	33.78	169	26.67	140.0	3.74	2.81	1474.
180	5.43	33.82	179	26.71	135.9	3.88	3.05	1474.
190	5.32	33.83	189	26.73	134.0	4.01	3.31	1474.
200	5,23	33.83	199	26.74	133.1	4.15	3.57	1474.
210	5.06	33.83	209	26.76	131.3	4.28	3.85	1473.
220	4.99	33.83	218	26.77	130.6	4.41	4.14	1473.
230	4.91	33.83	228	26.78	129.7	4.54	4.44	1473.
240	4.82	33.83	238	26.79	128.7	4.67	4.75	1473.
250	4.71	33.84	248	26.81	127.0	4.80	5.06	1472.
260	4.61	33.84	258	26.82	126.0	4.92	5.39	1472.
270	4.52	33.84	268	26.83	125.1	5.05	5.73	1472.
280	4.44	33.85	278	26.85	123.6	5.17	6.08	1472.
290	4.39	33.86	288	26.86	122.6	5.30	6.44	1472.
300	4.36	33.86	298	26.87	122.2	5.42	6.81	1472.



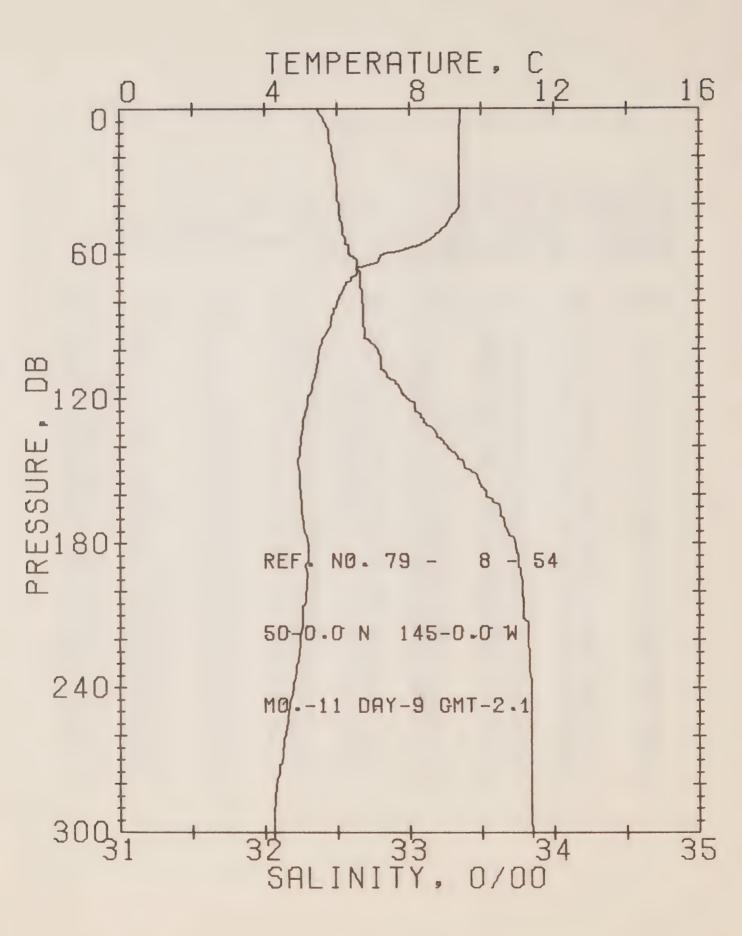
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 53 DATE 9/11/79

POSITION 49-52.0N, 145- 7.0W GMT .9 STATION W3

RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.51	32.55	0	25.14	282.9	•00	•00	1485.
10	9.51	32.55	10	25.14	283.1	.28	.01	1486.
20	9.51	32.55	20	25.14	283.2	•57	• 06	1486.
30	9.50	32.55	30	25.15	283.3	•85	.13	1486.
40	9.49	32.55	40	25.15	283.3	1.13	.23	1486.
50	9.34	32.56	50	25.18	280.4	1.42	• 36	1486.
60	9.14	32.56	60	25.21	277.6	1.69	•52	1485.
70	8.55	32.60	70	25.33	266.1	1.97	.70	1483.
80	6.67	32.70	80	25.68	233.3	2.21	.89	1476.
90	6.00	32.71	89	25.77	224.5	2.44	1.08	1473.
100	5.69	32.78	99	25.86	215.8	2.66	1.30	1473.
110	5.46	32.97	109	26.04	199.0	2.87	1.52	1472.
120	5.37	33.07	119	26.13	190.6	3.06	1.75	1472.
130	5.32	33.21	129	26.24	179.7	3.25	1.98	1472.
140	5.43	33.42	139	26.40	165.4	3.42	2.22	1473.
150	5.52	33.64	149	26.56	150.3	3.57	2.45	1474.
160	5.55	33.72	159	26.62	144.6	3.72	2.68	1474.
170	5.55	33.76	169	26.65	141.7	3.87	2.92	1474.
180	5.49	33.82	179	26.71	136.6	4.00	3.17	1474.
190	5.42	33.83	189	26.72	135.2	4.14	3.42	1474.
200	5.30	33.84	199	26.74	133.3	4.27	3.69	1474.
210	5.22	33.84	209	26.75	132.4	4.41	3.97	1474.
220	5.18	33.85	218	26.77	131.3	4.54	4.26	1474.
230	5.08	33.85	228	26.78	130.2	4.67	4.56	1474.
240	4.97	33.86	238	26.79	128.6	4.80	4.87	1473.
250	4.86	33.86	248	26.81	127.2	4.93	5.19	1473.
260	4.73	33.86	258	26.83	125.5	5.05	5.52	1473.
270	4.64	33.87	268	26.84	124.2	5.18	5.85	1472.



OFFSHORE OCEANOGRAPHY GROUP

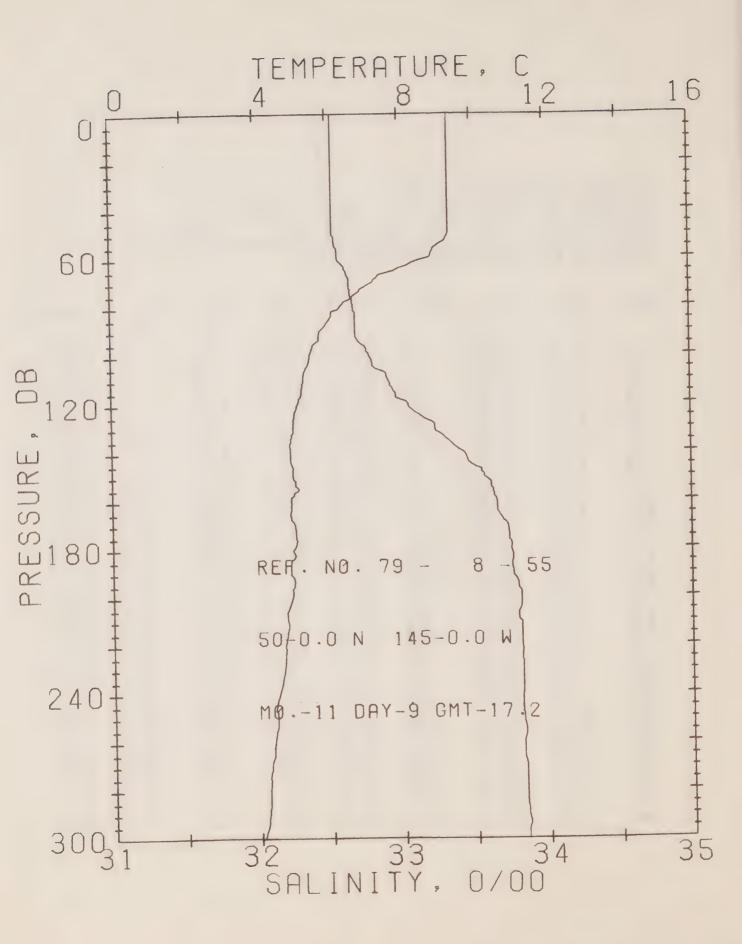
REFERENCE NO. 79-8-54 DATE 9/11/79

POSITION 50- .0N, 145- .0W GMT 2.1 STATION P

RESULTS OF STP CAST 182 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
	21.00			T		D	EN	
0	9.41	32.36	0	25.01	295.5	•00	• 00	1485.
10	9.40	32.44	10	25.08	289.6	•29	.01	1485.
20	9.40	32.47	20	25.10	287.5	•58	• 06	1485.
30	9.40	32.50	30	25.12	285.8	•87	•13	1485.
40	9.39	32.51	40	25.13	284.8	1.15	.23	1486.
50	8.91	32.54	50	25.23	275.5	1.43	•36	1484.
60	7.30	32.58	60	25.50	250.1	1.70	•51	1478.
70	6.40	32.66	70	25.68	232.8	1.94	•67	1475.
80	6.01	32.67	80	25.74	227.5	2.17	•85	1473.
90	5.82	32.68	89	25.77	224.6	2.40	1.04	1473.
100	5.50	32.78	99	25.88	213.6	2.62	1.25	1472.
110	5.39	32.84	109	25.94	208.0	2.83	1.48	1472.
120	5.18	32.98	119	26.08	195.2	3.03	1.72	1471.
130	5.03	33.10	129	26.19	184.7	3.22	1.96	1471.
140	4.96	33.26	139	26.33	172.1	3.40	2.20	1471.
150	4,95	33.43	149	26.46	159.3	3.56	2.45	1471.
160	4.98	33.53	159	26.54	152.3	3.72	2.69	1472.
170	5.05	33.65	169	26.62	144.2	3.86	2.94	1472.
180	5.19	33.73	179	26.67	140.1	4.01	3.19	1473.
190	5.12	33.75	189	26.69	137.7	4.14	3.46	1473.
200	5 • 14	33.78	199	26.72	135.8	4.28	3.73	1473.
210	5.03	33.79	209	26.74	133.9	4.42	4.01	1473.
220	4.97	33.82	218	26.77	131.0	4.55	4.30	1473.
230	4.89	33.83	228	26.78	129.6	4.68	4.60	1473.
240	4.77	33.84	238	26.81	127.6	4.81	4.90	1472.
250	4.65	33.84	248	26.82	126.3	4.93	5.22	1472.
260	4.54	33.84	258	26.83	125.2	5.06	5.55	1472.
270	4.46	33.84	268	26.84	124.5	5.18	5.89	1472.
280	4.31	33.84	278	26.86	122.9	5.31	6.23	1471.
290	4.26	33,84	288	26.86	122.5	5.43	6.59	1471.
300	4.24	33.85	298	26.87	121.8	5.55	6.96	1471.



OFFSHORE OCEANOGRAPHY GROUP

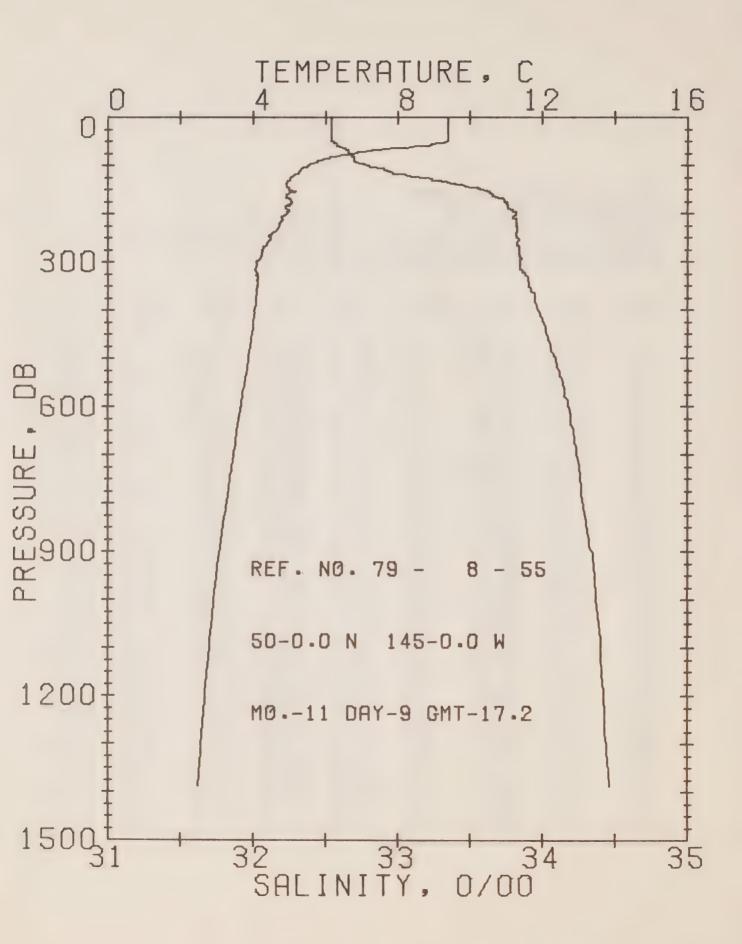
REFERENCE NO. 79- 8- 55 DATE 9/11/79

POSITION 50- .0N, 145- .0W GMT 17.2 STATION P

RESULTS OF STP CAST 195 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	0 // 1	30 Eh	0	7	200 4	D	EN	4.4.45.00
0 10	9.41	32.54 32.54	0	25.15	282.1	•00	.00	1485.
20	9.40	32.54	10 20	25.15	282.2	•28	•01	1485.
30	9.40			25.15	282.3	•56	•06	1485.
40	9.40	32.54 32.54	30 40	25.15	282.5	•85	•13	1486.
50	9.40	32.54	50	25.15 25.16	282.7	1.13	•23	1486.
60	8.86	32.57	60	25.26	272.7	1.41	•36 •52	1486.
70	7.25	32.65	70	25.56	244.4	1.94	•68	1478.
80	6.36	32.68	80	25.70	231.0	2.18	.87	1475.
90	5.79	32.69	89	25.78	223.5	2.41	1.06	1473.
100	5.50	32.79	99	25.89	212.8	2.63	1.27	1472.
110	5.31	32.92	109	26.02	201.1	2.83	1.49	1471.
120	5.14	33.05	119	26.14	189.6	3.03	1.73	1471.
130	5.00	33.23	129	26.30	174.6	3.21	1.96	1471.
140	4.94	33.44	139	26.47	158.4	3.38	2.19	1471.
150	4.99	33.57	149	26.57	149.3	3.53	2.41	1472.
160	4.94	33.66	159	26.64	142.1	3.68	2.64	1472.
170	5.03	33.73	169	26.69	138.0	3.82	2.88	1472.
180	5.00	33.75	179	26.71	136.2	3.96	3.13	1472.
190	4.91	33.77	189	26.73	133.9	4.09	3.38	1472.
200	4.95	33.82	199	26.77	130.6	4.22	3.64	1472.
210	4.81	33.82	209	26.78	129.2	4.35	3.91	1472.
220	4.73	33.82	218	26.79	128.4	4.48	4.20	1472.
230	4.69	33.83	228	26.81	127.3	4.61	4.49	1472.
240	4.55	33.83	238	26.82	126.2	4.74	4.79	1471.
250	4,48	33.83	248	26.83	125.2	4.86	5.11	1471.
260	4.39	33.83	258	26.84	124.3	4.99	5.43	1471.
270	4.29	33.84	268	26.86	122.6	5.11	5.77	1471.
280	4.25	33.84	278	26.86	122.3	5.23	6.11	1471.
290	4.22	33.85	288	26.87	121.3	5.36	6.46	1471.
300	4.09	33.85	298	26.89	120.0	5.48	6.83	1471.



OFFSHORE OCEANOGRAPHY GROUP

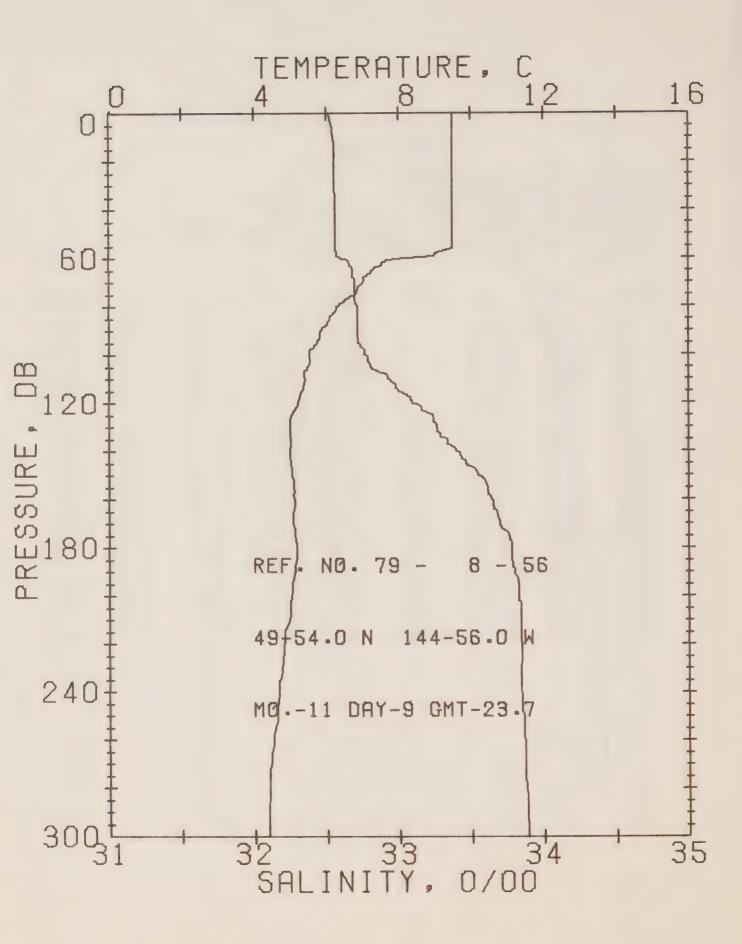
REFERENCE NO. 79- 8- 55 DATE 9/11/79

POSITION 50- .0N, 145- .0W GMT 17.2 STATION P

RESULTS OF STP CAST 315 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
υ	9.41	32.54	0	25.15	282.1	•00	•00	1485.
10	9.40	32.54	10	25.15	282.2	•28	.01	1485.
20	9.40	32.54	20	25.15	282.3	•56	.06	1485.
30	9.40	32.54	30	25.15	282.5	•85	.13	1486.
50	9.38	32.54	50	25.16	282.6	1.41	.36	1486.
75	6.75	32.66	75	25.63	237.3	2.06	.77	1476.
100	5.50	32.79	99	25.89	212.8	2.63	1.27	1472.
125	5.04	33.14	124	26.22	181.8	3.12	1.84	1471.
150	4.99	33.57	149	26.57	149.3	3.53	2.41	1472.
175	5.06	33.74	174	26.69	137.7	3.89	3.00	1472.
200	4.95	33.82	199	26.77	130.6	4.22	3.64	1472.
225	4.72	33.82	223	26.79	128.4	4.55	4.34	1472.
250	4.48	33.83	248	26.83	125.2	4.86	5.11	1471.
300	4.09	33.85	298	26.89	120.0	5.48	6.83	1471.
400	4.03	33.97	397	26.99	111.3	6.64	10.95	1472.
500	3.86	34.09	496	27.10	101.6	7.70	15.84	1473.
600	3.67	34.17	595	27.18	94.1	8.68	21.31	1474.
800	3.28	34.28	793	27.31	83.4	10.44	33.83	1476.
1000	2.90	34.37	990	27.41	73.7	12.00	48.08	1478.
1200	2.67	34.42	1188	27.47	68.7	13.42	64.00	1480.



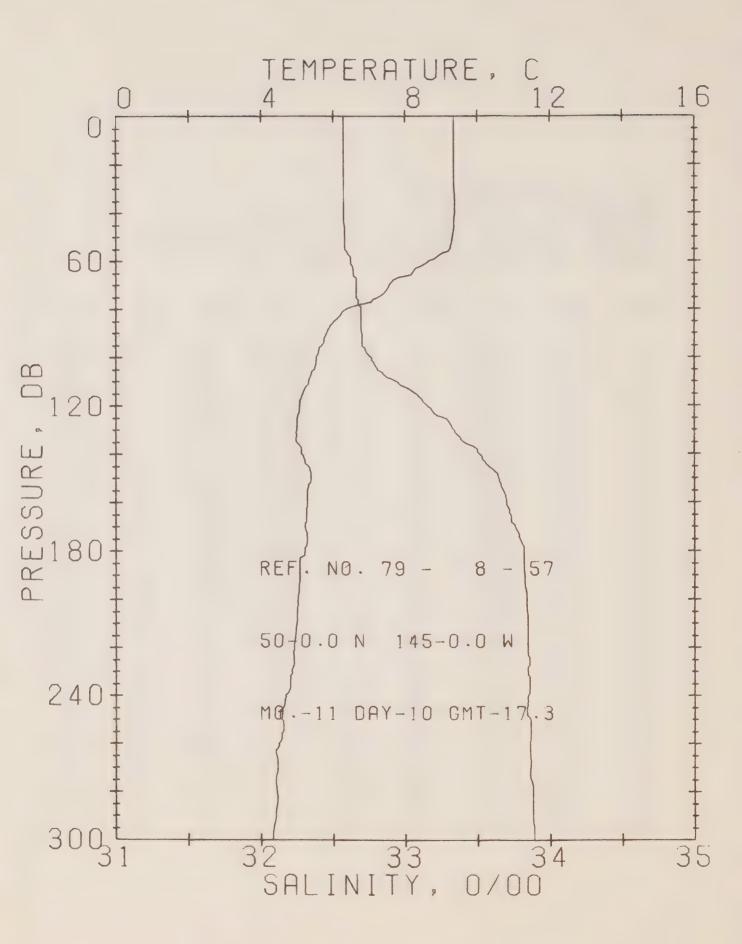
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 56 DATE 9/11/79

POSITION 49-54.0N, 144-56.0W GMT 23.7 STATION P

RESULTS OF STP CAST 187 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.48	32.51	0	25.12	285.4	•00	.00	1485.
10	9.49	32.54	10	25.14	283.3	•28	.01	1486.
20	9.50	32.55	20	25.15	283.1	•57	•06	1486.
30	9.50	32.55	30	25.15	283.3	•85	.13	1486.
40	9.50	32.56	40	25.15	282.7	1.13	.23	1486.
50	9.50	32.56	50	25.15	282.9	1.42	• 36	1486.
60	8.21	32.59	60	25.38	261.8	1.70	•52	1482.
70	7.01	32.69	70	25.62	238.3	1.94	•68	1477.
80	6.29	32.71	80	25.73	227.9	2.17	•86	1475.
90	5.85	32.71	89	25.79	222.8	2.40	1.05	1473.
100	5.53	32.77	99	25.87	214.7	2.62	1.27	1472.
110	5.42	32.93	109	26.01	201.6	2.83	1.49	1472.
120	5.21	33.09	119	26.16	187.3	3.02	1.72	1471.
130	4.98	33.26	129	26.33	171.9	3,20	1.94	1471.
140	4.99	33.40	139	26.43	161.9	3.37	2.17	1471.
150	5.05	33.55	149	26.54	151.5	3.52	2.40	1472.
160	5.12	33.64	159	26.61	145.6	3.67	2.64	1472.
170	5.08	33.70	169	26.66	140.8	3.82	2.88	1472.
180	5.17	33.78	179	26.71	135.9	3.95	3.12	1473.
190	5.11	33.80	189	26.73	133.9	4.09	3.38	1473.
200	5.02	33.83	199	26.77	130.7	4.22	3.64	1473.
210	4.95	33.84	209	26.78	129.3	4.35	3.91	1473.
220	4.80	33.85	218	26.81	127.0	4.48	4.19	1472.
230	4.76	33.84	228	26.81	127.4	4.60	4.48	1472.
240	4.67	33.84	238	26.82	126.0	4.73	4.79	1472.
250	4.62	33.86	248	26.84	124.5	4.86	5.10	1472.
260	4.51	33.87	258	26.86	122.9	4.98	5,42	1472.
270	4.44	33.87	268	26.86	122.1	5.10	5.75	1472.
280	4.39	33.88	278	26.87	121.1	5.22	6.09	1472.
290	4.38	33.88	288	26.88	120.8	5.35	6.45	1472.
300	4.36	33.89	298	26.89	119.9	5.47	6.81	1472.



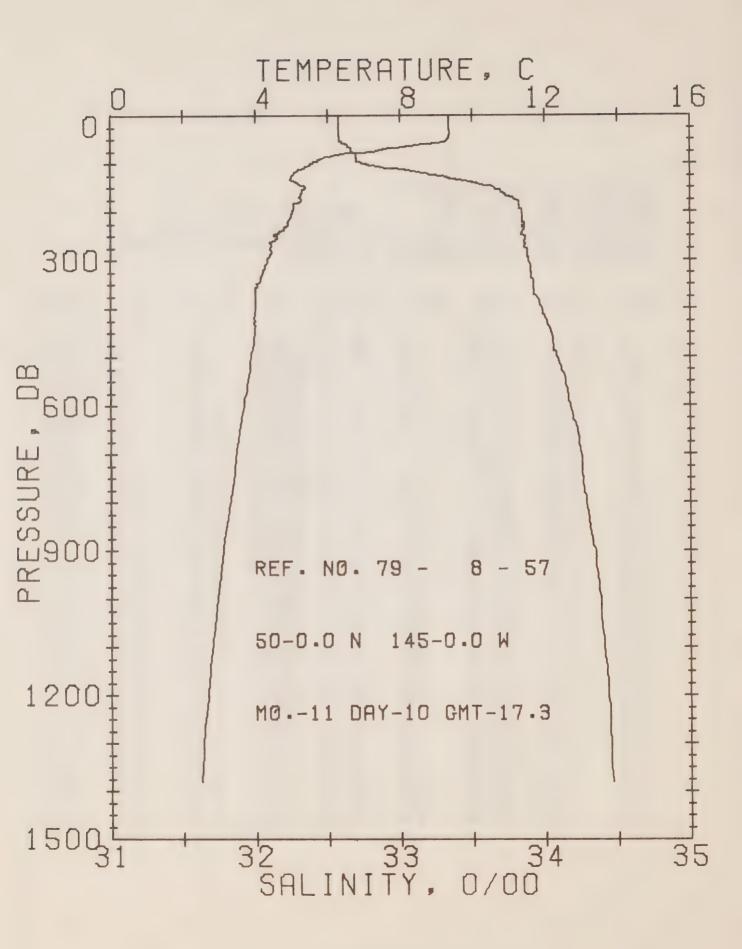
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 57 DATE 10/11/79

POSITION 50- .0N. 145- .0W GMT 17.3 STATION P

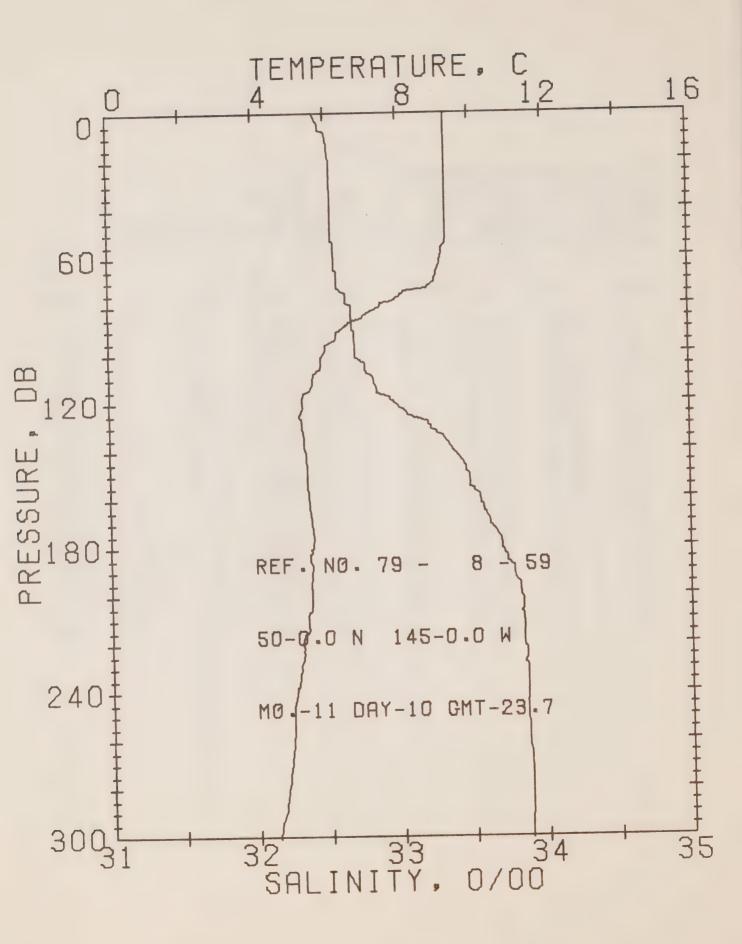
RESULTS OF STP CAST 196 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T	_	D	EN	
0	9.36	32.57	0	25.18	279.1	•00	.00	1485.
10	9.36	32.57	10	25.18	279.4	•28	.01	1485.
20	9.37	32.57	20	25.18	279.6	•56	• 06	1485.
30	9.38	32.57	30	25.18	279.9	•84	•13	1485.
40	9.38	32.57	40	25.18	280.2	1.12	.23	1486.
50	9.33	32.58	50	25.20	278.8	1.40	• 36	1486.
60	8.63	32.62	60	25.34	265.6	1.67	•51	1483.
70	7.55	32.66	70	25.53	247.6	1.93	•68	1479.
80	6.36	32.69	80	25.71	230.2	2.17	•86	1475.
90	5.82	32.70	89	25.78	223.1	2.40	1.06	1473.
100	5.53	32.77	99	25.87	214.7	2.62	1.27	1472.
110	5.32	32.95	109	26.04	198.9	2.83	1.50	1471.
120	5.06	33.15	119	26.23	181.2	3.02	1.72	1471.
130	4.98	33.34	129	26.39	166.2	3.19	1.94	1471.
140	5.12	33.51	139	26.50	155.1	3.35	2.16	1472.
150	5.39	33.64	149	26.58	148.2	3.50	2.38	1473.
160	5.27	33.70	159	26.64	142.8	3.65	2.61	1473.
170	5.20	33.76	169	26.69	137.7	3.79	2.85	1473.
180	5.21	33.82	179	26.74	133.4	3.92	3.09	1473.
190	5.06	33.83	189	26.76	131.1	4.05	3.34	1473.
200	5.01	33.84	199	26.78	129.8	4.19	3.60	1473.
210	4.97	33.85	209	26.79	128.8	4.31	3.87	1473.
220	4.91	33.85	218	26.80	128.1	4.44	4.15	1473.
230	4.82	33.85	228	26.81	127.3	4.57	4.45	1472.
240	4.66	33.85	238	26.83	125.6	4.70	4.75	1472.
250	4.55	33.87	248	26.85	123.0	4.82	5.06	1472.
260	4.48	33.86	258	26.85	123.1	4.95	5.38	1472.
270	4.46	33.87	268	26.86	122.4	5.07	5.71	1472.
280	4.44	33.88	278	26.87	121.4	5.19	6.05	1472.
290	4.40	33.88	288	26.88	121.0	5.31	6.41	1472.
300	4.33	33.89	298	26,89	119.6	5.43	6.77	1472.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO: 79-8-57 DATE 10/11/79
POSITION 50- .0N: 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 316 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	9.36	32.57	0	25.18	279.1	•00	•00	1485.
10	9:36	32.57	10	25.18	279.4	•28	.01	1485.
20	9.37	32.57	20	25.18	279.6	• 56	•06	1485.
30	9.38	32.57	30	25.18	279.9	•84	•13	1485.
50	9.33	32.58	50	25.20	278.8	1.40	.36	1486.
75	7.22	32.66	75	25.57	243.3	2.05	.77	1478.
100	5.53	32.77	99	25.87	214.7	2.62	1.27	1472.
125	4.99	33.29	124	26.35	170.0	3.11	1.83	1471.
150	5.39	33.64	149	26.58	148.2	3.50	2.38	1473.
175	5.27	33.80	174	26.71	136.0	3.86	2.97	1473.
200	5'.01	33.84	199	26.78	129.8	4.19	3.60	1473.
225	4.91	33.86	223	26.81	127.5	4.51	4.30	1473.
250	4.55	33.87	248	26.85	123.0	4.82	5.06	1472.
300	4.33	33.89	298	26.89	119.6	5.43	6.77	1472.
400	3.99	33.98	397	27.00	110.2	6.58	10.86	1472.
500	3.87	34.08	496	27.09	102.0	7.64	15.72	1473.
600	3.67	34.17	595	27.18	94.1	8.62	21.19	1474.
800	3.28	34.28	793	27.31	83.2	10.37	33.68	1476.
1000	2.94	34.38	990	27.42	73.4	11.93	47.93	1478.
1200	2.67	34.43	1188	27.48	67.9	13.34	63.73	1480.



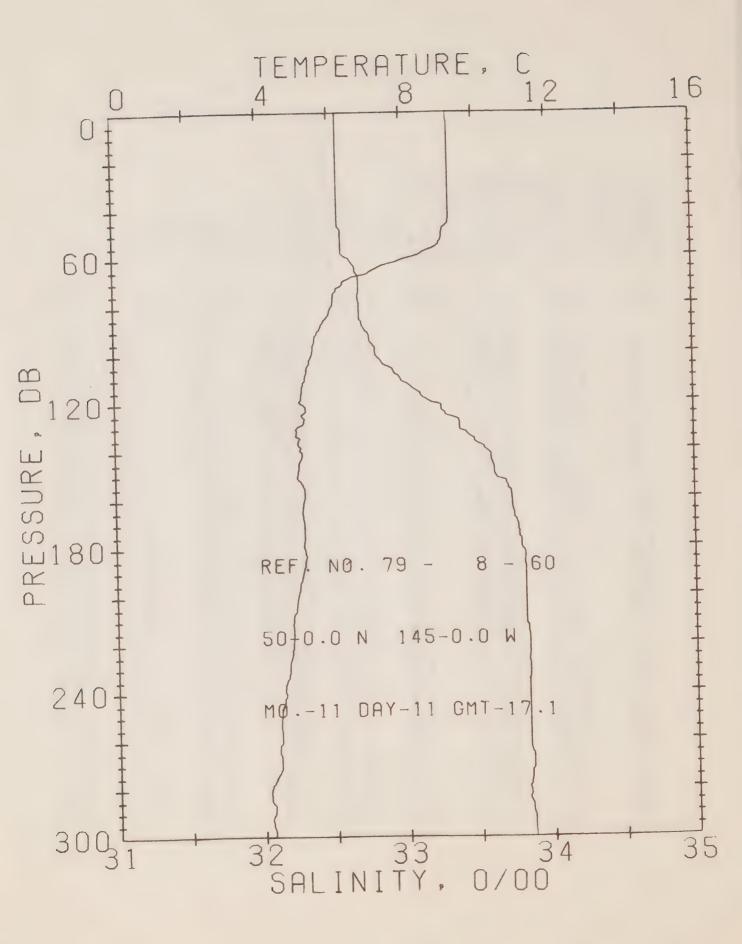
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 59 DATE 10/11/79

POSITION 50- .0N, 145- .0W GMT 23.7 STATION P

RESULTS OF STP CAST 182 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.33	32.42	0	25.07	289.8	•00	•00	1485.
10	9.35	32.51	10	25.14	283.8	•29	•01	1485.
20	9.35	32.53	20	25.15	282.4	•57	•06	1485.
30	9.35	32.53	30	25.16	282.3	•85	•13	1485.
40	9.36	32.54	40	25.16	282.1	1.13	•23	1486.
50	9.36	32.54	50	25.16	282.2	1.42	• 36	1486.
60	9.19	32.56	60	25.20	278.4	1.70	•52	1485.
70	9.01	32.57	70	25.24	275.1	1.97	.70	1485.
80	7.49	32.67	80	25.54	246.2	2.23	•90	1479.
90	6.38	32.68	89	25.70	231.3	2.47	1.11	1475.
100	5.90	32.70	99	25.77	224.2	2.70	1.33	1473.
110	5.61	32.82	109	25.90	212.0	2.92	1.56	1472.
120	5.31	32.97	119	26.06	197.4	3.13	1.80	1472.
130	5.31	33.22	129	26.25	178.8	3.31	2.04	1472.
140	5.40	33.37	139	26.36	168.8	3.49	2.28	1473.
150	5.43	33.48	149	26.44	161.0	3.65	2.52	1473.
160	5,48	33.55	159	26.50	156.2	3.81	2.77	1474.
170	5.54	33.62	169	26.54	152.0	3.97	3.03	1474.
180	5.57	33.70	179	26.60	146.5	4.11	3.30	1475.
190	5.54	33.78	189	26.67	140.3	4.26	3.57	1475.
200	5.52	33.83	199	26.71	136.5	4.40	3.84	1475.
210	5.42	33.84	209	26.73	134.7	4.53	4.13	1475.
220	5.23	33.84	218	26.75	132.6	4.66	4.42	1474.
230	5.21	33.87	228	26.78	130.2	4.80	4.72	1474.
240	5.05	33.87	238	26.80	128.5	4.93	5.03	1474.
250	4.95	33.86	248	26.80	128.2	5.05	5.35	1473.
260	4.94	33.87	258	26.81	127.5	5.18	5.68	1474.
270	4.87	33.88	268	26.83	126.0	5.31	6.03	1473.
280	4.77	33.89	278	26.84	124.2	5.43	6.38	1473.
290	4.70	33.89	288	26.85	123.6	5.56	6.74	1473.
300	4.54	33.88	298	26.86	122.7	5.68	7.11	1473.



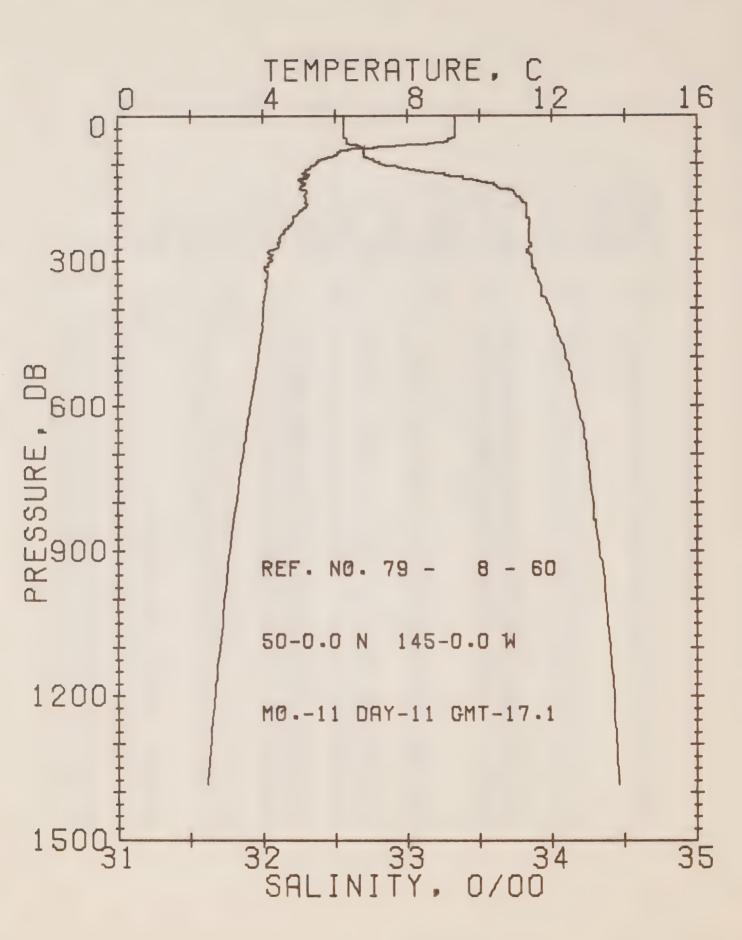
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 60 DATE 11/11/79

POSITION 50- .0N, 145- .0W GMT 17.1 STATION P

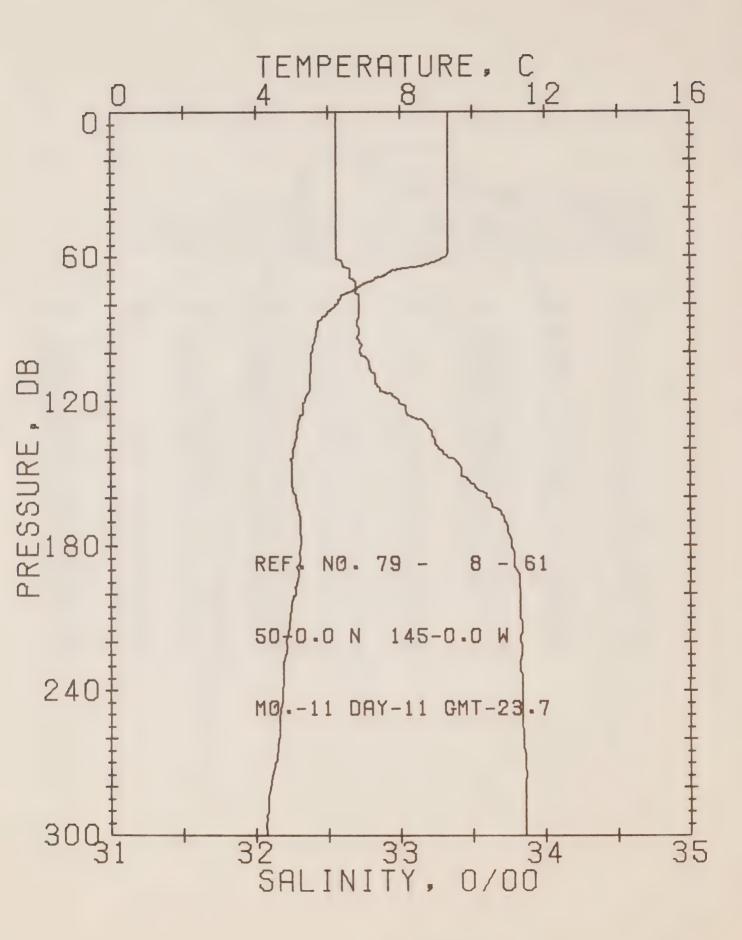
RESULTS OF STP CAST 213 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.31	32.56	10	25.18	279.1	•00	.00	1485.
10	9.34	32.56	10	25.18	279.8	•28	.01	1485.
20	9.33	32.56	20	25.18	279.8	•56	.06	1485.
30	9'.33	32.56	30	25.18	280.0	•84	.13	1485.
40	9.33	32.56	40	25.18	280.1	1.12	.23	1485.
50	9.13	32.58	50	25.23	275.8	1.40	• 36	1485.
60	8.28	32.63	60	25.40	259.8	1.67	•51	1482.
70	6.36	32.70	70	25.72	229.4	1.91	.67	1475.
80	6.04	32.70	80	25.76	225.6	2.14	.84	1473.
90	5.67	32.74	89	25.83	218.4	2.36	1.04	1472.
100	5.47	32.81	99	25.91	211.0	2.58	1.24	1472.
110	5.26	32.98	109	26.07	196.0	2.78	1.46	1471.
120	5.10	33.19	119	26.25	178.6	2.97	1.68	1471.
130	5.04	33.39	129	26.42	163.1	3.14	1.90	1471.
140	5.10	33.58	139	26.56	149.7	3.29	2.11	1472.
150	5.01	33.63	149	26.61	145.1	3.44	2.33	1472.
160	5.23	33.74	159	26.67	139.4	3.58	2.55	1473.
170	5.20	33.78	169	26.71	136.2	3.72	2.78	1473.
180	5.16	33.80	179	26.73	134.3	3.86	3.03	1473.
190	5.15	33.83	189	26.75	132.1	3.99	3.28	1473.
200	4.98	33.83	199	26.77	130.3	4.12	3.54	1473.
210	4.86	33.83	209	26.79	129.0	4.25	3.81	1472.
220	4.83	33.85	218	26.81	127.3	4.38	4.09	1472.
230	4.72	33.85	228	26.82	126.2	4.50	4.38	1472.
240	4.58	33.84	238	26.83	125.5	4.63	4.68	1472.
250	4.48	33.84	248	26.84	124.5	4.76	4.99	1471.
260	4.49	33.84	258	26.84	124.6	4.88	5.32	1472.
270	4.46	33.86	268	26.85	123.0	5.00	5.65	1472.
280	4.17	33.83	278	26.86	122.0	5.13	5.99	1471.
290	4.25	33.86	288	26.87	121.3	5.25	6.35	1471.
300	4.25	33.86	298	26.88	121.0	5.37	6.71	1471.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 60 DATE 11/11/79
POSITION 50- .0N, 145- .0W GMT 17.1 STATION P
RESULTS OF STP CAST 330 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	9.31	32.56	0	25.18	279.1	•00	.00	1485.
10	9.34	32.56	10	25.18	279.8	•28	.01	1485.
20	9.33	32.56	20	25.18	279.8	•56	•06	1485.
30	9.33	32.56	30	25.18	280.0	•84	•13	1485.
50	9.13	32.58	50	25.23	275.8	1.40	• 36	1485.
75	6.09	32.69	75	25.74	226.9	2.03	•75	1474.
100	5.47	32.81	99	25.91	211.0	2.58	1.24	1472.
125	5.14	33.29	124	26.33	171.6	3.05	1.79	1471.
150	5.01	33.63	149	26.61	145.1	3.44	2.33	1472.
175	5.21	33.79	174	26.72	135.6	3.79	2.90	1473.
200	4.98	33.83	199	26.77	130.3	4.12	3.54	1473.
225	4.79	33.85	223	26.81	127.2	4.44	4.23	1472.
250	4.48	33.84	248	26.84	124.5	4.76	4.99	1471.
300	4.25	33.86	298	26.88	121.0	5.37	6.71	1471.
400	4.01	33.99	397	27.01	109.6	6.52	10.81	1472.
500	3.86	34.09	496	27.10	101.4	7.58	15.65	1473.
600	3.64	34.18	595 /	27.19	93.4	8.55	21.08	1474.
800	3.26	34.29	793	27.31	82.5	10.30	33.54	1476.
1006	2.92	34.37	990	27.41	73.9	11.86	47.83	1478.
1200	2.67	34.43	1188	27.48	68.0	13.28	63.73	1480.



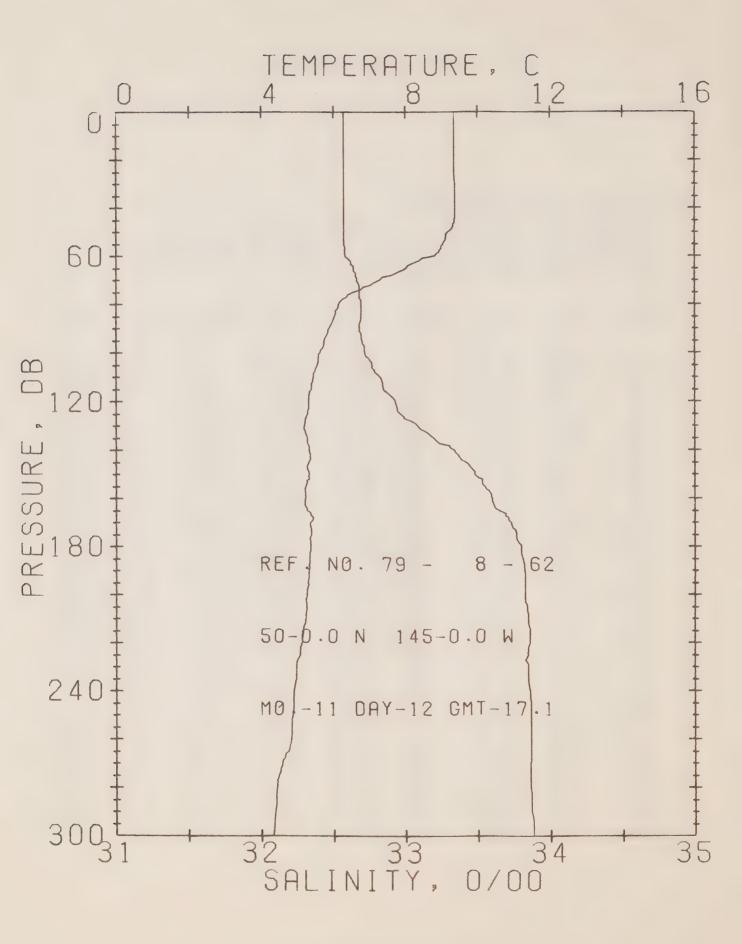
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 61 DATE 11/11/79

POSITION 50- .0N, 145- .0W GMT 23.7 STATION P

RESULTS OF STP CAST 185 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
0	9.32	32.55	0	25.17	280.0	•00	.00	1485.
10	9.33	32.55	10	25.17	280.3	•28	.01	1485.
20	9.32	32.55	20	25.17	280.4	•56	•06	1485.
30	9.32	32.55	30	25.17	280.5	.84	.13	1485.
40	9.33	32.55	40	25.17	280.8	1.12	•23	1485.
50	9.33	32.55	50	25.17	281.0	1.40	• 36	1486.
60	9.29	32.56	60	25.19	279.9	1.68	•52	1486.
70	7.23	32.68	70	25.59	241.9	1.94	•69	1478.
80	6.22	32.71	80	25.74	227.0	2.18	•86	1474.
90	5.68	32.71	89	25.81	220.8	2.40	1.06	1472.
100	5.53	32.72	99	25.83	218.4	2.62	1.27	1472.
110	5.49	32.82	109	25.92	210.2	2.83	1.50	1472.
120	5.35	32.99	119	26.07	196.4	3.04	1.74	1472.
130	5.15	33.18	129	26.24	180.0	3.23	1.98	1471.
140	5.02	33.27	139	26.33	172.0	3.40	2.22	1471.
150	4.98	33.42	149	26.45	160.0	3.57	2.47	1471.
160	5.10	33.60	159	26.58	148.4	3.72	2.71	1472.
170	5.22	33.72	169	26.66	140.9	3.87	2.95	1473.
180	5.23	33.77	179	26.70	137.4	4.01	3.20	1473.
190	5.17	33.80	189	26.73	134.5	4.14	3.46	1473.
200	5.10	33.83	199	26.76	131.6	4.27	3.72	1473.
210	4.93	33.83	209	26.78	129.8	4.40	3.99	1473.
220	4.84	33.83	218	26.79	128.9	4.53	4.28	1472.
230	4.75	33.83	228	26.80	128.0	4.66	4.57	1472.
240	4.72	33.84	238	26.81	127.0	4.79	4.87	1472.
250	4.66	33.84	248	26.82	126.5	4.92	5.19	1472.
260	4.60	33.85	258	26.83	125.1	5.04	5.52	1472.
270	4.52	33.86	268	26.85	123.6	5.17	5.86	1472.
280	4.36	33.86	278		122.0	5.29	6.20	1471.
290	4.31	33.86	288	26.87	121.5	5.41	6.55	1471.
300	4.26	33.86	298	26.88	121.1	5.53	6.92	1471.



OFFSHORE OCEANOGRAPHY GROUP

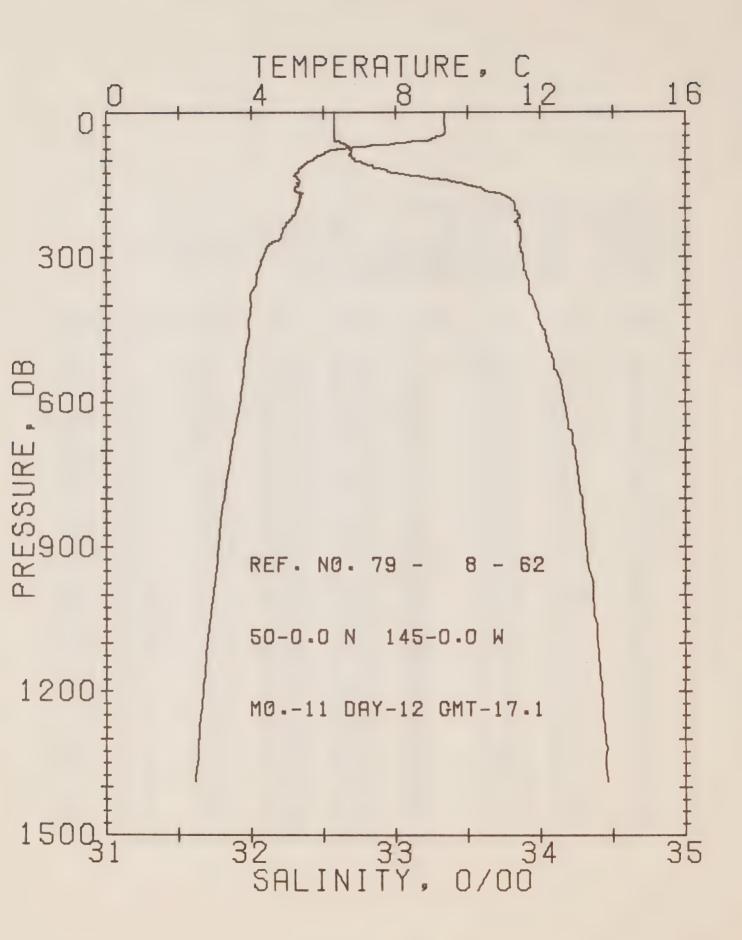
REFERENCE NO. 79- 8- 62

POSITION 50- .0N, 145- .0W GMT 17.1 STATION P

RESULTS OF STP CAST 196 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	0:36	70 57	0	7 10	270 4	D	EN	1400
0	9,36	32.57	0	25.18	279.1	•00	•00	1485.
10	9.37	32.57	10	25.18	279.5	•28	•01	1485.
20	9.37	32.57	20	25.18	279.6	• 56	•06	1485
30 40	9.38 9.38	32.57 32.57	30 40	25.18 25.18	280.0	•84	•13	1485.
50	9.17	32.57	50	25.21	280.2	1.12	•23	1486. 1485.
60	8.79	32.58	60	25.28	270.9	1.40	•36 •51	1484.
70	7.29	32.66	70	25.56	244.2	1.67		
80	6.14	32.69	80	25.74	227.6	1.93 2.16	•68 •86	1478. 1474.
90	5.89	32.68	89	25.76	225.5	2.39	1.05	1473.
100	5.62	32.71	99	25.82	219.8	2.61	1.03	1472.
110	5.43	32.83	109	25.93	209.2	2.83	1.50	1472.
120	5.31	32.93	119	20.02	200.6	3.03	1.74	1471.
130	5.18	33.09	129	26.16	187.5	3.23	1.99	1471.
140	5.34	33.34	139	26.34	170.3	3.41	2.24	1472.
150	5.33	33.48	149	26.46	159.8	3.57	2.48	1473.
160	5.22	33.60	159	26.56	149.7	3.73	2.72	1473.
170	5.37	33.73	169	26.65	149.7	3.73	2.97	1474.
180	5.36	33.80	179	26.71	136.6	4.01	3.22	1474.
190	5.32	33.82	189	26.73	134.5	4.15	3.47	1474.
200	5.25	33.83	199	26.74	133.3	4.28	3.74	1474.
210	5.22	33.85	209	26.76	131.6	4.41	4.02	1474.
220	5.13	33.86	218	26.78	129.9	4.54	4.30	1474.
230	4.97	33.85	228	26.79	129.0	4.67	4.60	1473.
240	4.88	33.86	238	26.81	127.5	4.80	4.91	1473.
250	4.86	33.87	248	26.82	126.5	4.93	5.22	1473.
260	4.81	33.87	258	26.82	126.0	5.06	5.55	1473.
270	4.57	33.86	268	26.84	124.2	5.18	5.89	1472.
280	4.43	33.86	278	26.86	122.7	5.30	6.24	1472.
290	4.38	33.87	288	26.87	121.5	5.43	6.59	1472.
300	4.31	33.88	298	26.89	120.1	5.55	6.95	1472.



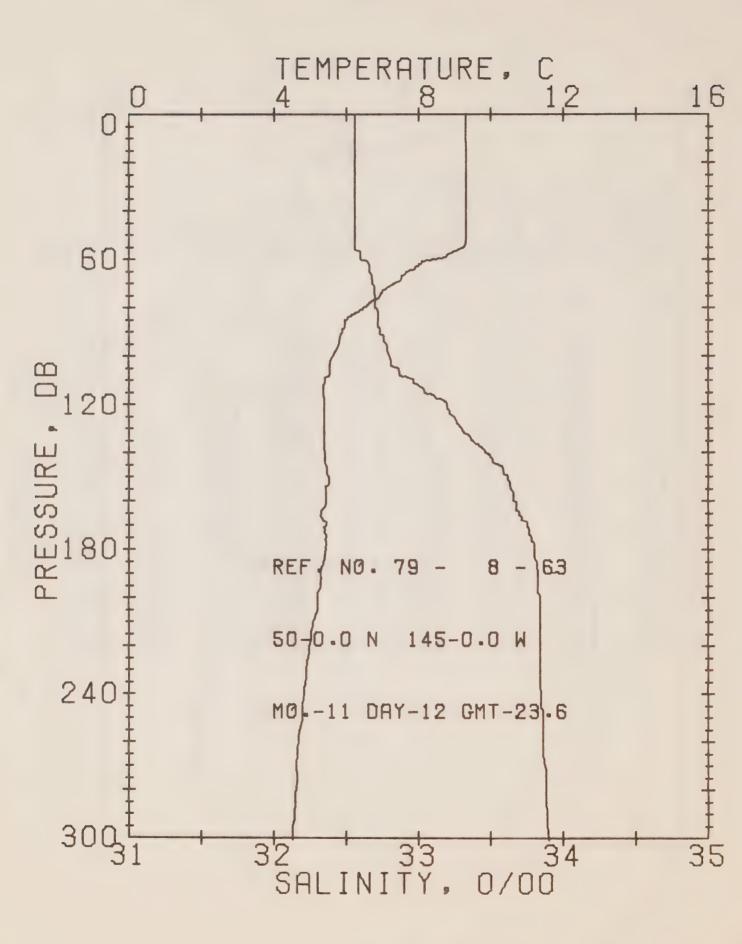
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 62 DATE 12/11/79

POSITION 50- .0N, 145- .0W GMT 17.1 STATION P

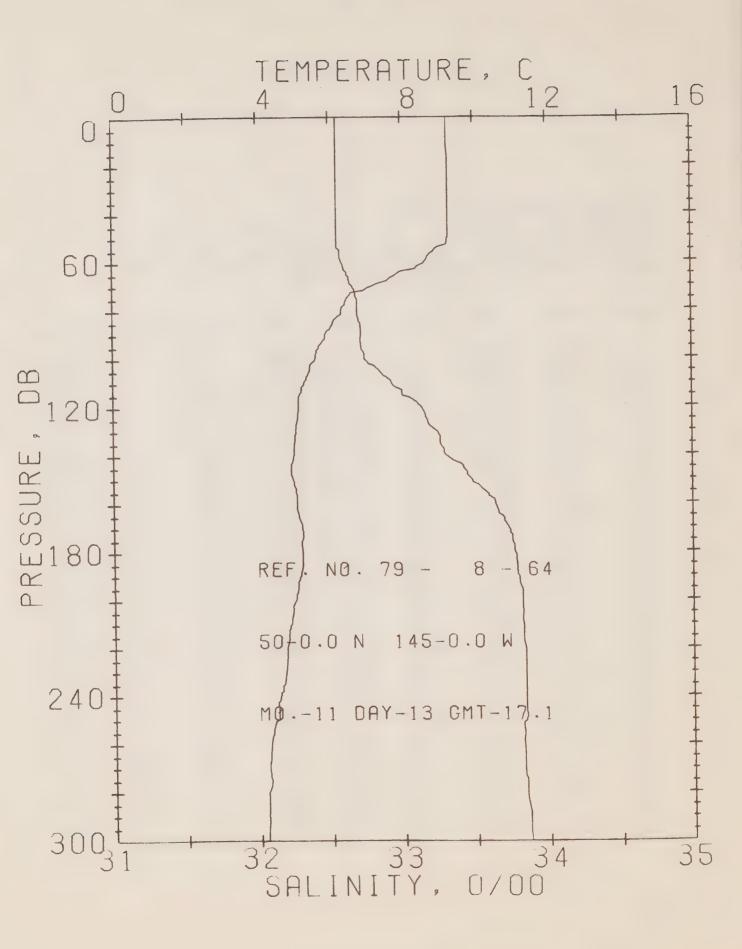
RESULTS OF STP CAST 339 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.36	32.57	0	25.18	279.1	• 0 0	•00	1485.
10	9.37	32.57	10	25.18	279.5	•28	.01	1485.
20	9,37	32.57	20	25.18	279.6	•56	• 06	1485.
30	9,38	32.57	30	25.18	280.0	•84	•13	1485.
50	9.17	32.57	50	25.21	277.1	1.40	• 36	1485.
75	6.52	32.68	75	25.68	232.9	2.05	.77	1475.
100	5.62	32.71	99	25.82	219.8	2.61	1.27	1472.
125	5.27	32.97	124	26.06	197.0	3.13	1.87	1471.
150	5.33	33.48	149	26.46	159.8	3.57	2.48	1473.
175	5,38	33.77	174	26.68	139.0	3.94	3.09	1474.
200	5.25	33.83	199	26.74	133.3	4.28	3.74	1474.
225	5.06	33.85	223	26.78	129.9	4.61	4.45	1473.
250	4.86	33.87	248	26.82	126.5	4.93	5.22	1473.
300	4.31	33.88	298	26.89	120.1	5.55	6.95	1472.
400	3,99	33.97	397	26.99	111.1	6.71	11.08	1472.
500	3.85	34.07	496	27.09	102.6	7.78	15.98	1473.
600	3,69	34.16	595	27.17	95.1	8.76	21.49	1474.
800	3.24	34.29	793	27.32	82.0	10.53	34.07	1476.
1000	2.95	34.36	990	27.40	75.0	12.10	48.50	1478.
1200	2.66	34.42	1188	27.47	68.6	13.53	64.51	1480.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 63 DATE 12/11/79
POSITION 50- .0N, 145- .0W GMT 23.6 STATION P
RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	9.31	32.56	0	25.18	279.1	•00	•00	1485.
10	9.31	32.56	10	25.18	279.3	•28	.01	1485.
20	9.32	32.56	20	25.18	279.6	•56	.06	1485.
30	9.32	32.56	30	25.18	279.8	•84	•13	1485.
40.	9.32	32.56	40	25.18	280.0	1.12	. 23	1485.
50	9.32	32.56	50	25.18	280.2	1.40	•36	1486.
60	8.39	32.60	60	25.36	263.6	1.67	•51	1482.
70	7.31	32.68	70	25.57	242.9	1.93	•68	1478.
80	6.48	32.70	80	25.70	231.0	2.16	.86	1475.
90	5,89	32.73	89	25.80	221.7	2.39	1.05	1473.
100	5.61	32.80	99	25.88	213.7	2.60	1.26	1472.
110	5.41	32.97	109	26.04	198.5	2.81	1.49	1472.
120	5.38	33.19	119	26.22	181.8	3.00	1.71	1472.
130	5.38	33.30	129	26.31	173.7	3.18	1.94	1472.
140	5.41	33.47	139	26.44	161.4	3.35	2.17	1473.
150	5.51	33.62	149	26.55	151.5	3.51	2.40	1474.
160	5.43	33.66	159	26.59	147.7	3.65	2.63	1474.
170	5.43	33.75	169	26.66	141.1	3.80	2.88	1474.
180	5.43	33.80	179	26.70	137.4	3.94	3.12	1474.
190	5.28	33.83	189	26.74	133.6	4.07	3.38	1474.
200	5.20	33.84	199	26.76	132.0	4.21	3.64	1474.
210	5.08	33.84	209	26.77	130.7	4.34	3.92	1473.
220	4.95	33.84	218	26.78	129.4	4.47	4.20	1473.
230	4.90	33.84	228	26.79	128.9	4.60	4.50	1473.
240	4.83	33.85	238	26.81	127.5	4.73	4.81	1473.
250	4.77	33.86	248	26.82	126.2	4.85	5.13	1473.
260	4.66	33.86	258	26.83	125.1	4.98	5.45	1472.
270	4.62	33.87	268	26.85	123.7	5.10	5.79	1472.
280	4.61	33.88	278	26.85	123.2	5.23	6.13	1472.
290	4.57	33.89	288	26.87	122.1	5.35	6.49	1472.
300	4.52	33.90	298	26.88	121.0	5.47	6.86	1472.



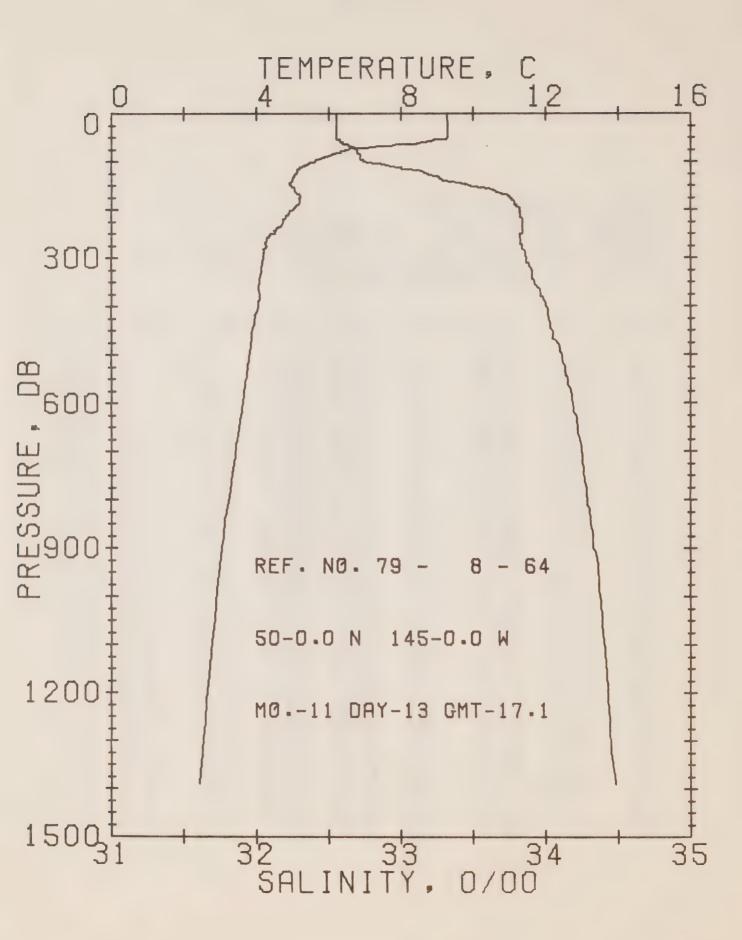
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 64 DATE 13/11/79

POSITION 50- .0N, 145- .0W GMT 17.1 STATION P

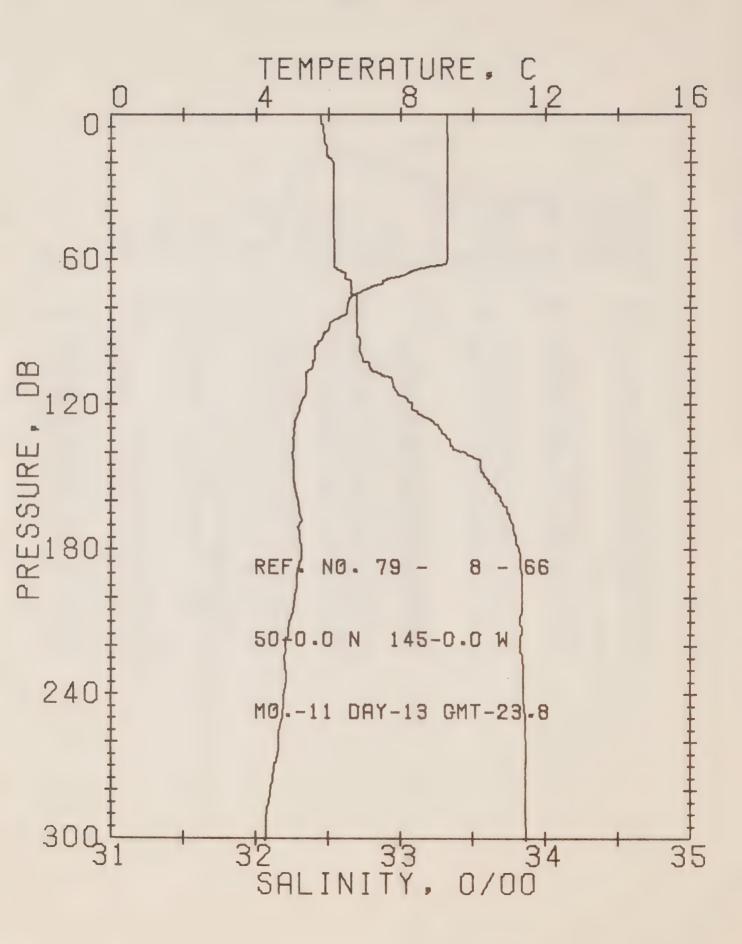
RESULTS OF STP CAST 193 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
	0.00	70 55	_	T	0.70	D	EN	41.0=
0	9.29	32.55	0	25.18	279.6	•00	.00	1485.
10	9.29	32.55	10	25.18	279.7	•28	•01	1485.
20	9.30	32.55	20	25.18	280 • 1	•56	•06	1485.
30	9.31	32.55	30	25.18	280.4	.84	•13	1485.
40	9.30	32.55	40	25.18	280.5	1.12	.23	1485.
50	9.30	32.55	50	25.18	280.6	1.40	• 36	1485.
60	8.65	32.59	60	25.31	268.5	1.68	•51	1483.
70	7.20	32.66	70	25.57	243.0	1.93	•68	1478.
80	6.33	32.69	80	25.71	229.9	2.17	•86	1475.
90	5.88	32.72	89	25.79	222.4	2.39	1.06	1473.
100	5.59	32.74	99	25.84	217.6	2.61	1.27	1472.
110	5.27	32.93	109	26.03	199.9	2.82	1.49	1471 •
120	5.12	33.13	119	26.20	183.3	3.01	1.72	1471.
130	5.03	33.24	129	26.30	174.2	3.19	1.94	1471.
140	4.98	33.30	139	26.35	169.3	3.36	2.18	1471 •
150	4.96	33.48	149	26.50	155.7	3.52	2.42	1471.
160	5.08	33.64	159	26.61	145.2	3.67	2.66	1472.
170	5.20	33.73	169	26.67	140.0	3.82	2.90	1473.
180	5.19	33.78	179	26.71	136.6	3.96	3.14	1473.
190	5.14	33.80	189	26.73	134.2	4.09	3.40	1473.
200	5.00	33.82	199	26.76	131.2	4.22	3.66	1473.
210	4.88	33.83	209	26.78	129.2	4.35	3.93	1472.
220	4.76	33.84	218	26.81	127.3	4.48	4.21	1472.
230	4.72	33.84	228	26.81	126.9	4.61	4.51	1472.
240	4.55	33.84	238	26.83	125.2	4.73	4.81	1472.
250	4.51	33.84	248	26.83	124.8	4.86	5.12	1472.
260	4.28	33.82	258	20.84	123.7	4.98	5.44	1471.
270	4.23	33.83	268	26.86	122.8	5.11	5.77	1471.
280	4.22	33.84	278	26.86	122.0	5.23	6.12	1471.
290	4.19	33.86	288	26.88	120.3	5.35	6.47	1471.
300	4.19	33.87	298	26.89	119.6	5.47	6.83	1471.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 64 DATE 13/11/79
POSITION 50- .0N, 145- .0W GMT 17.1 STATION P
RESULTS OF STP CAST 300 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	9.29	32.55	0	25.18	279.6	•00	•00	1485.
10	9'.29	32.55	10	25.18	279.7	•28	•01	1485.
20	9.30	32.55	20	25.18	280.1	•56	.06	1485.
30	9.31	32.55	30	25.18	280.4	•84	.13	1485.
50	9.30	32.55	50	25.18	280.6	1.40	•36	1485.
75	6.47	32.69	75	25.69	231.5	2.05	.77	1475.
100	5.59	32.74	99	25.84	217.6	2.61	1.27	1472.
125	5.09	33.17	124	26.24	130.1	3.10	1.83	1471.
150	4.96	33.48	149	26.50	155.7	3.52	2.42	1471.
175	5.19	33.75	174	26.69	138.3	3.89	3.02	1473.
200	5.00	33.82	199	26.76	131.2	4.22	3.66	1473.
225	4.74	33.84	223	26.81	127.1	4.55	4.36	1472.
250	4.51	33.84	248	26.83	124.8	4.86	5.12	1472.
300	4.19	33.87	298	26.89	119.6	5.47	6.83	1471.
400	4.05	34.00	397	27.01	109.3	6.62	10.91	1472.
500	3.81	34.11	496	27.12	99.6	7.66	15.70	1473.
600	3.63	34.18	595	27.20	92.8	8.62	21.08	1474.
800	3.22	34.29	793	27.32	82.0	10.36	33.46	1476.
1000	2.91	34.37	990	27.42	73.4	11.91	47.59	1478.
1200	2.64	.34.43	1188	27.48	67.6	13.31	63.35	1480.



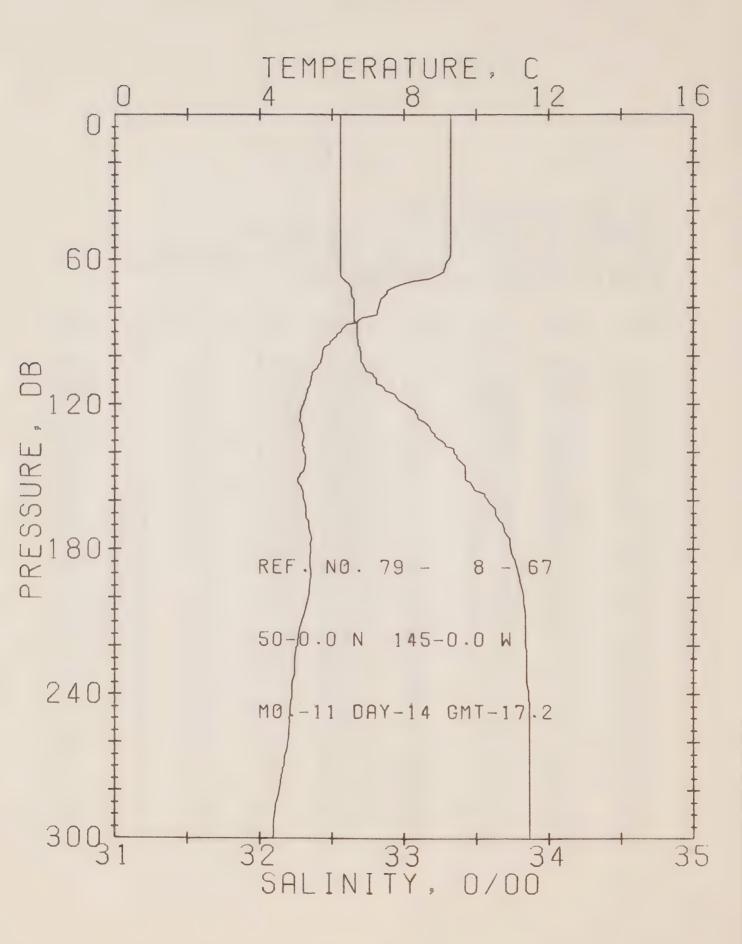
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 66 DATE 13/11/79

POSITION 50- .0N, 145- .0W GMT 23.8 STATION P

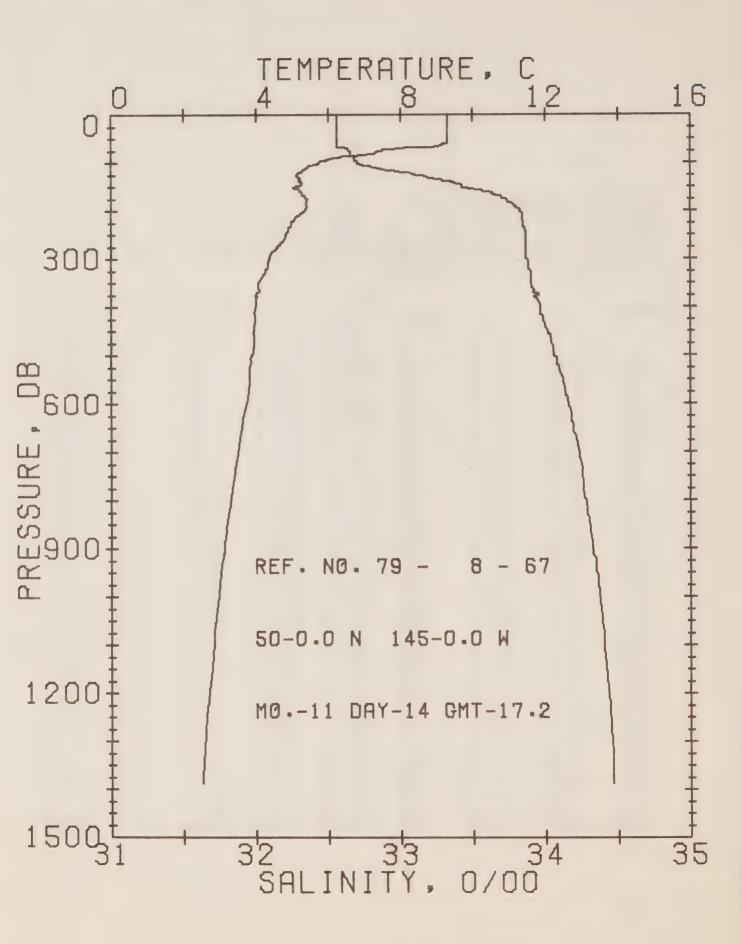
RESULTS OF STP CAST 188 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	РОТ.	SOUND
				T		D	EN	
0	9.29	32.44	0	25.09	287.7	•00	.00	1484.
10	9.31	32.47	10	25.11	286.0	•29	.01	1485.
20	9.31	32.53	20	25.16	282.1	•57	•06	1485.
30	9.31	32.53	30	25.16	281.9	•85	•13	1485.
40	9.31	32.53	40	25.16	282.0	1.14	•23	1485.
50	9.31	32.53	50	25.16	282.2	1.42	• 36	1485.
60	9.31	32.54	60	25.17	281.7	1.70	•52	1486.
70	7.48	32.65	70	25.53	247.4	1.96	•69	1479.
80	6.52	32.69	80	25.69	232.2	2.20	•87	1475.
90	5.91	32.69	89	25.76	224.9	2.43	1.07	1473.
100	5.63	32.72	99	25.83	219.2	2.65	1.29	1472.
110	5.38	32.94	109	26.02	200.4	2.86	1.51	1472.
120	5.22	33.08	119	26.15	188.2	3.06	1.74	1471.
130	5.05	33.27	129	26.32	172.2	3.24	1.97	1471.
140	4.99	33.45	139	26.47	158.2	3.41	2.20	1471.
150	5.03	33.58	149	26.57	149.0	3.56	2.43	1472.
160	5.16	33.69	159	26.64	142.3	3.70	2.66	1473.
170	5.19	33.78	169	26.71	136.4	3.84	2.89	1473.
180	5.24	33.82	179	26.74	133.7	3.98	3.13	1473.
190	5.14	33.84	189	26.76	131.4	4.11	3.38	1473.
200	5.06	33.84	199	26.77	130.4	4.24	3.64	1473.
210	4.92	33.83	209	26.78	129.7	4.37	3.91	1473.
220	4.80	33.83	218	26.79	128.5	4.50	4.20	1472.
230	4.81	33.85	228	26.81	127.2	4.63	4.49	1472.
240	4.76	33.85	238	26.81	126.8	4.76	4.79	1472.
250	4.73	33.86	248	26.83	125.7	4.88	5.11	1472.
260	4.61	33.87	258	26.84	124.1	5.01	5.43	1472.
270	4.50	33.87	268	26.85	123.1	5.13	5.77	1472.
280	4.38	33.86	278	26.86	122.1	5.25	6.11	1471.
290	4.29	33.86	288	26.87	121.3	5.37	6.47	1471.
300	4.27	33.87	298	26.88	120.5	5.50	6.83	1471.



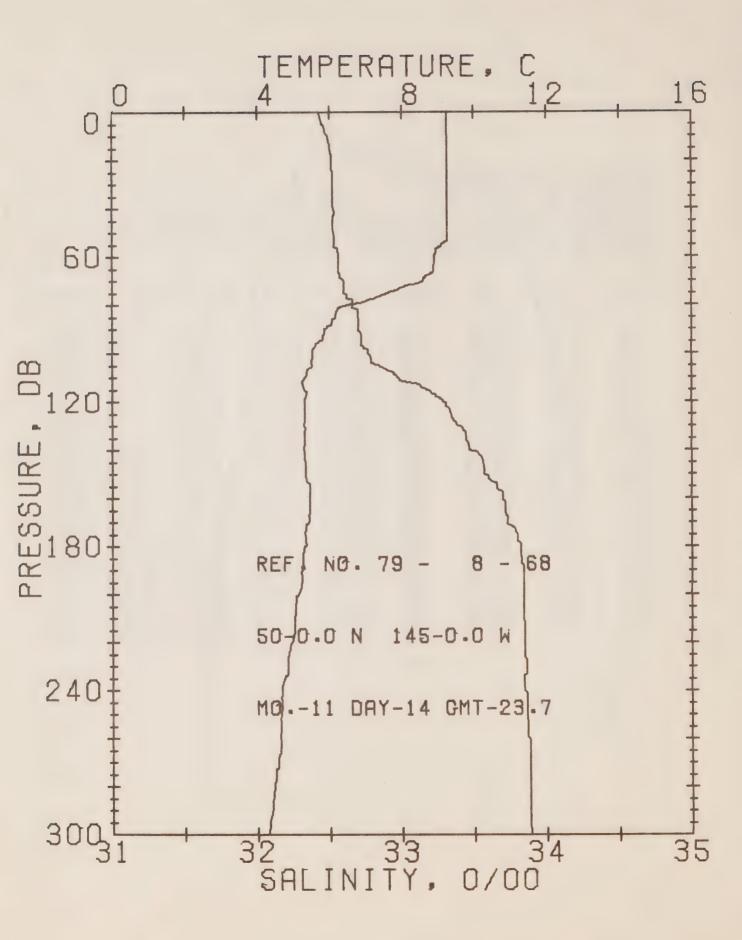
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 67
POSITION 50- .0N, 145- .0W GMT 17.2 STATION P
RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.30	32.56	0	25.19	279.0	•00	.00	1485.
10	9.30	32.56	10	25.19	279.1	•28	.01	1485.
20	9.30	32.56	20	25.19	279.3	• 56	•06	1485.
30	9.31	32.56	30	25.18	279.7	.84	•13	1485.
40	9.31	32.56	40	25.18	279.8	1.12	.23	1485.
50	9.31	32.56	50	25.18	280.0	1.40	• 36	1486.
60	9.24	32.56	60	25.20	279.1	1.68	•51	1485.
70	7'.98	32.62	70	25.43	256.5	1.95	.69	1481.
80	7.28	32.65	80	25.56	244.9	2.20	.88	1478.
90	6.23	32.67	89	25.71	230.3	2.44	1.09	1474.
100	5.72	32.70	99	25.80	222.1	2.66	1.31	1473.
110	5.41	32.81	109	25.92	210.4	2.88	1.54	1472.
120	5.21	33.02	119	26.11	192.6	3.08	1.78	1471.
130	5.18	33.18	129	26.24	180.4	3.27	2.01	1471.
140	5.22	33.35	139	26.37	168.2	3.44	2.25	1472.
150	5.09	33.43	149	26.44	160.9	3.61	2.50	1472.
160	5.22	33.58	159	26.55	151.3	3.76	2.74	1473.
170	5.35	33.68	169	26.62	145.0	3.91	2.99	1473.
180	5.42	33.74	179	26.65	141.8	4.05	3.25	1474.
190	5.42	33.79	189	26.69	137.9	4.19	3.51	1474.
200	5.33	33.83	199	26.73	134.3	4.33	3.78	1474.
210	5.15	33.84	209	26.76	131.5	4.46	4.06	1474.
220	5.04	33.84	218	26.77	130.4	4.59	4.35	1473.
230	4.96	33.85	228	26.79	128.9	4.72	4.64	1473.
240	4.89	33.86	238	26.81	127.4	4.85	4.95	1473.
250	4.81	33.87	248	26.82	125.9	4.98	5.26	1473.
260	4.76	33.87	258	26.83	125.5	5.10	5.59	1473.
270	4.67	33.87	268	26.84	124.5	5.23	5.93	1473.
280	4.52	33.87	278	26.86	123.0	5.35	6.28	1472.
290	4.39	33.87	288	20.87	121.7	5.47	6.63	1472.
300	4.35	33.87	298	26.87	121.3	5.59	7.00	1472.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 67 DATE 14/11/79
POSITION 50- .0N, 145- .0W GMT 17.2 STATION P
RESULTS OF STP CAST 369 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.30	32.56	0	25.19	279.0	•00	• 0 0	1485.
10	9.30	32.56	10	25.19	279.1	•28	.01	1485.
20	9.30	32.56	20	25.19	279.3	•56	.06	1485.
30	9.31	32.56	30	25.18	279.7	•84	•13	1485.
50	9.31	32.56	50	25.18	280.0	1.40	• 36	1486.
75	7.44	32.64	75	25.53	247.7	2.08	•79	1479.
100	5.72	32.70	99	25.80	222.1	2.66	1.31	1473.
125	5.12	33.09	124	26.17	186.4	3.18	1.90	1471.
150	5.09	33.43	149	26.44	160.9	3.61	2.50	1472.
175	5.43	33.73	174	26.64	142.6	3.98	3.12	1474.
200	5.33	33.83	199	26.73	134.3	4.33	3.78	1474.
225	4.97	33.85	223	26.79	129.0	4.66	4.49	1473.
250	4.81	33.87	248	26.82	125.9	4.98	5.26	1473.
300	4.35	53.87	298	26.87	121.3	5.59	7.00	1472.
460	3.98	33.97	397	26.99	110.7	6.76	11.13	1472.
500	3.89	34.06	496	27.07	104.0	7.83	16.06	1473.
600	3.72	34.16	595	27.17	95.7	8.83	21.63	1474.
800	3.29	34.28	793	27.30	83.7	10.61	34.31	1476.
1000	2,95	34.37	990	27.41	74.2	12.18	48.68	1478.
1200	2.68	34.43	1188	27.48	67.8	13.60	64.58	1480.



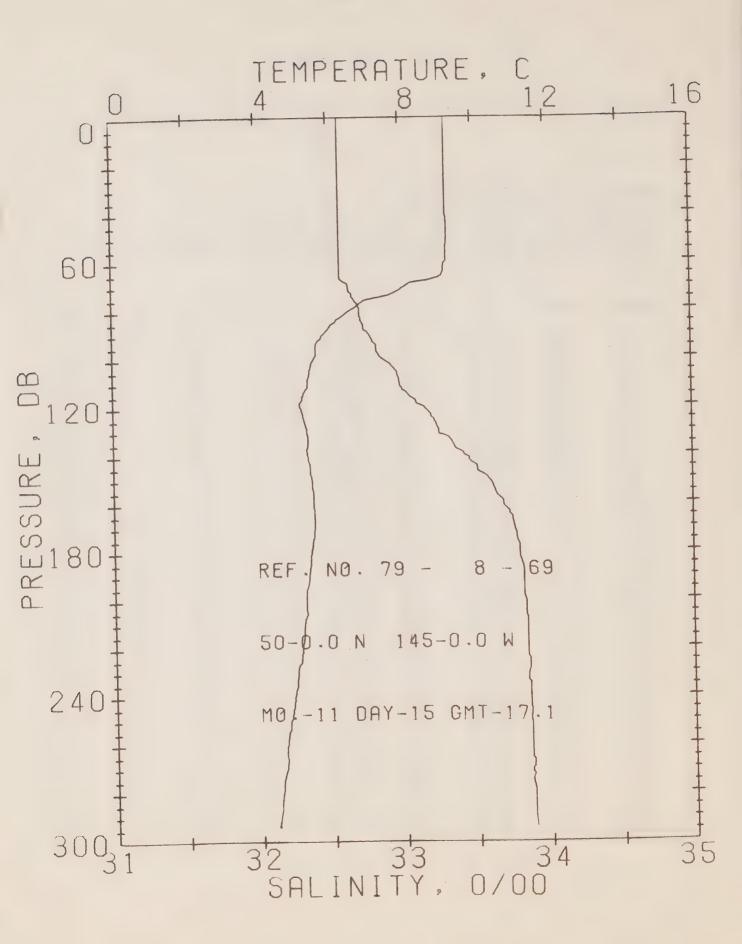
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 68 DATE 14/11/79

POSITION 50- .0N, 145- .0W GMT 23.7 STATION P

RESULTS OF STP CAST 200 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	9.26	32.42	0	25.08	288.7	•00	•00	1484.
10	9.27	32.48	10	25.13	284.3	•29	.01	1485.
20	9.28	32.51	20	25.15	282.7	•57	.06	1485.
30	9.28	32.52	30	25.16	282.2	•85	•13	1485.
40	9.28	32.52	40	25.16	282.1	1.13	.23	1485.
50	9.28	32.52	50	25.16	282.3	1.42	• 36	1485.
60	8.92	32.56	60	25.25	274.3	1.70	•52	1484.
70	8.58	32.59	70	25.32	267.3	1.97	•70	1483.
80	6.47	32.66	80	25.67	233.8	2.22	•89	1475.
90	5.88	32.70	89	25.78	223.8	2.45	1.09	1473.
100	5.52	32.77	99	25.87	214.6	2.67	1.30	1472.
110	5.31	32.97	109	26.06	197.3	2.88	1.52	1471.
120	5.31	33.29	119	26.31	173.5	3.06	1.74	1472.
130	5.31	33.40	129	26.40	165.4	3.23	1.95	1472.
140	5.28	33.47	139	26.45	159.9	3.39	2.18	1472.
150	5.34	33.57	149	26.53	153.2	3.55	2.40	1473.
160	5.44	33.70	159	26.62	144.7	3.69	2.64	1474.
170	5.41	33.73	169	26.64	142.3	3.84	2.88	1474.
180	5.31	33.82	179	26.73	134.5	3.97	3.12	1474.
190	5.22	33.84	189	26.75	132.1	4.11	3.38	1473.
200	5.12	33.84	199	26.77	131.1	4.24	3.64	1473.
210	5.01	33.84	209	26.78	129.9	4.37	3.91	1473.
220	4.94	33.85	218	26.79	128.5	4.50	4.19	1473.
230	4.84	33.86	228	26.81	126.8	4.63	4.49	1473.
240	4.66	33.85	238	26.83	125.6	4.75	4.79	1472.
250	4.65	33.86	248	26.83	124.9	4.88	5.10	1472.
260	4.62	33.87	258	26.85	123.6	5.00	5.42	1472.
270	4.56	33.88	268	26.86	122.6	5.13	5.76	1472.
280	4.45	33.88	278	26.87	121.5	5.25	6.10	1472.
290	4.38	33.88	288	26.88	120.8	5.37	6.45	1472.
300	4.30	33.89	298	26.90	119.3	5.49	6.81	1472.



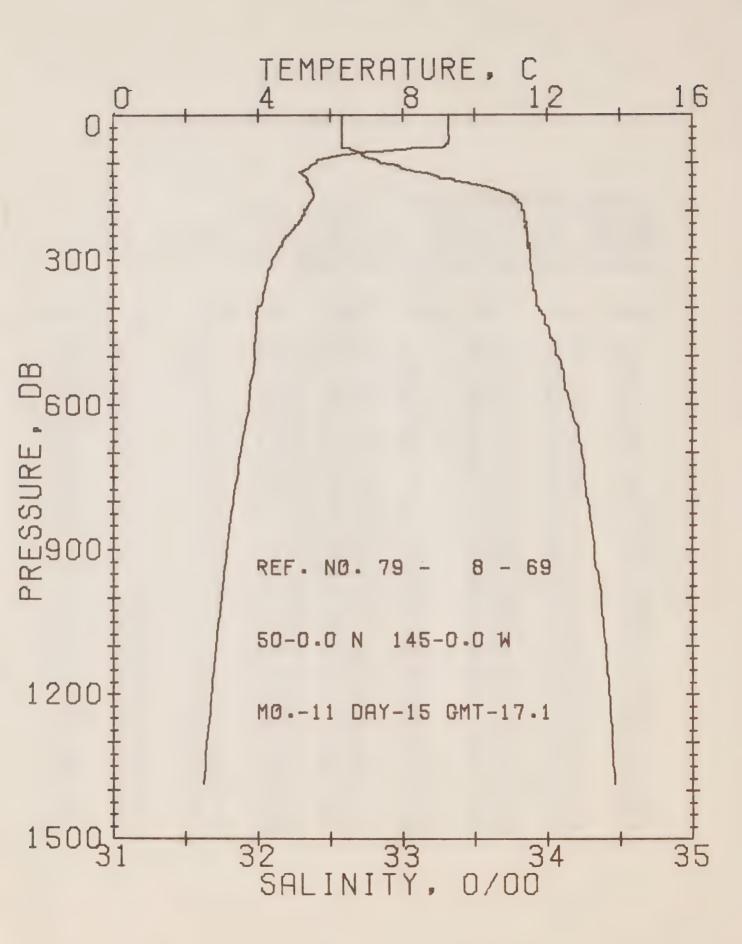
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 69 DATE 15/11/79

POSITION 50- .0N, 145- .0W GMT 17.1 STATION P

RESULTS OF STP CAST 199 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

0         9.28         32.58         0         25.20         277.2         .00         1485.           16         9.28         32.58         10         25.20         277.4         .28         .01         1485.           20         9.28         32.58         20         25.20         277.5         .55         .06         1485.           30         9.29         32.58         30         25.20         278.0         1.11         .23         1485.           40         9.29         32.58         40         25.20         278.5         1.39         .35         1486.           60         9.27         32.58         60         25.21         278.1         1.67         .51         1486.           60         9.27         32.58         60         25.21         278.1         1.67         .51         1486.           70         8.15         32.64         70         25.42         25.74         1.94         .69         1482.           80         6.61         32.71         80         25.84         217.5         241         1.07         1473.           100         5.58         32.87         99         25.95	PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
10       9.28       32.58       10       25.20       277.4       .28       .01       1485.         20       9.28       32.58       20       25.20       277.5       .55       .06       1485.         30       9.29       32.58       30       25.20       277.9       .83       .13       1485.         40       9.29       32.58       40       25.20       278.5       1.39       .35       1486.         50       9.31       32.58       50       25.20       278.5       1.39       .35       1486.         60       9.27       32.58       60       25.21       278.5       1.39       .35       1486.         70       8.15       32.64       70       25.42       257.4       1.94       .69       1482.         80       6.61       32.71       80       25.69       231.8       2.18       .88       1476.         90       5.85       32.87       99       25.95       207.8       2.62       1.28       1472.         110       5.39       32.99       109       26.06       196.7       2.82       1.49       1472.         120       5.18							D	EN	
20       9.28       32.58       20       25.20       277.5       .55       .06       1485.         30       9.29       32.58       30       25.20       277.9       .83       .13       1485.         40       9.29       32.58       40       25.20       278.0       1.11       .23       1485.         50       9.31       32.58       50       25.20       278.5       1.39       .35       1486.         60       9.27       32.58       60       25.21       278.1       1.67       .51       1486.         70       8.15       32.64       70       25.42       257.4       1.94       .69       1482.         80       6.61       32.71       80       25.69       231.8       2.18       .88       1476.         90       5.85       32.78       89       25.84       217.5       2.41       1.07       1473.         100       5.58       32.87       99       25.95       207.8       2.62       1.28       1472.         110       5.39       33.15       119       26.21       182.5       3.01       1.72       1471.         130       5.35							•00	.00	1485.
30       9.29       32.58       30       25.20       277.9       .83       .13       1485.         40       9.29       32.58       40       25.20       278.0       1.11       .23       1485.         50       9.31       32.58       50       25.20       278.5       1.39       .35       1486.         60       9.27       32.58       60       25.21       278.1       1.67       .51       1486.         70       8.15       32.64       70       25.42       257.4       1.94       .69       1482.         80       6.61       32.71       80       25.69       231.8       2.18       .88       1476.         90       5.85       32.87       99       25.95       207.8       2.62       1.28       1472.         110       5.39       32.99       109       26.06       196.7       2.82       1.49       1472.         120       5.18       33.15       119       26.21       182.5       3.01       1.72       1471.         130       5.36       33.43       139       26.41       163.8       3.36       2.18       1472.         140       5.36 <td></td> <td></td> <td></td> <td>10</td> <td></td> <td>277.4</td> <td>•28</td> <td>.01</td> <td>1485.</td>				10		277.4	•28	.01	1485.
40       9.29       32.58       40       25.20       278.0       1.11       .23       1485.         50       9.31       32.58       50       25.20       278.5       1.39       .35       1486.         60       9.27       32.58       60       25.21       278.1       1.67       .51       1486.         70       8.15       32.64       70       25.42       257.4       1.94       .69       1482.         80       6.61       32.71       80       25.69       231.8       2.18       .88       1476.         90       5.85       32.78       89       25.84       217.5       2.41       1.07       1473.         100       5.58       32.87       99       25.95       207.8       2.62       1.28       1472.         110       5.39       32.99       109       26.06       196.7       2.82       1.49       1472.         120       5.18       33.15       119       26.21       182.5       3.01       1.72       1471.         130       5.35       33.25       129       26.27       177.0       3.19       1.94       1472.         140       5.46							• 55	•06	1485.
50       9.31       32.58       50       25.20       278.5       1.39       .35       1486.6         60       9.27       32.58       60       25.21       278.1       1.67       .51       1486.         70       8.15       32.64       70       25.42       257.4       1.94       .69       1482.         80       6.61       32.71       80       25.69       231.8       2.18       .88       1476.         90       5.85       32.78       89       25.84       217.5       2.41       1.07       1473.         100       5.58       32.87       99       25.95       207.8       2.62       1.28       1472.         110       5.39       32.99       109       26.06       196.7       2.82       1.49       1472.         120       5.18       33.15       119       26.21       182.5       3.01       1.72       1471.         130       5.35       33.25       129       26.27       177.0       3.19       1.94       1472.         140       5.36       33.43       139       26.41       163.8       3.36       2.18       1473.         150				30		277.9	•83	.13	1485.
60         9.27         32.58         60         25.21         278.1         1.67         .51         1486.           70         8.15         32.64         70         25.42         257.4         1.94         .69         1482.           80         6.61         32.71         80         25.69         231.8         2.18         .88         1476.           90         5.85         32.78         89         25.95         207.8         2.62         1.28         1472.           100         5.58         32.87         99         25.95         207.8         2.62         1.28         1472.           110         5.39         32.99         109         26.06         196.7         2.82         1.49         1472.           120         5.18         33.15         119         26.21         182.5         3.01         1.72         1471.           130         5.35         33.25         129         26.27         177.0         3.19         1.94         1472.           140         5.36         33.43         139         26.41         163.8         3.36         2.18         1473.           150         5.48         33.59 <t< td=""><td></td><td></td><td></td><td></td><td></td><td>278.0</td><td>1.11</td><td>•23</td><td>1485.</td></t<>						278.0	1.11	•23	1485.
70         8.15         32.64         70         25.42         257.4         1.94         .69         1482.           80         6.61         32.71         80         25.69         231.8         2.18         .88         1476.           90         5.85         32.78         89         25.84         217.5         2.41         1.07         1473.           100         5.58         32.87         99         25.95         207.8         2.62         1.28         1472.           110         5.39         32.99         109         26.06         196.7         2.82         1.49         1472.           120         5.18         33.15         119         26.21         182.5         3.01         1.72         1471.           130         5.35         33.25         129         26.27         177.0         3.19         1.94         1472.           140         5.36         33.43         139         26.41         163.8         3.36         2.18         1473.           150         5.48         33.59         149         26.53         153.0         3.52         2.41         1474.           160         5.52         33.69								• 35	1486.
80       6.61       32.71       80       25.69       231.8       2.18       .88       1476.         90       5.85       32.78       89       25.84       217.5       2.41       1.07       1473.         100       5.58       32.87       99       25.95       207.8       2.62       1.28       1472.         110       5.39       32.99       109       26.06       196.7       2.82       1.49       1472.         120       5.18       33.15       119       26.21       182.5       3.01       1.72       1471.         130       5.35       33.25       129       26.27       177.0       3.19       1.94       1472.         140       5.36       33.43       139       26.41       163.8       3.36       2.18       1473.         150       5.48       33.59       149       26.53       153.0       3.52       2.41       1474.         160       5.52       33.69       159       26.60       146.5       3.67       2.65       1474.         170       5.55       33.77       169       26.66       141.0       3.81       2.89       1474.         180								•51	1486.
90       5.85       32.78       89       25.84       217.5       2.41       1.07       1473.         100       5.58       32.87       99       25.95       207.8       2.62       1.28       1472.         110       5.39       32.99       109       26.06       196.7       2.82       1.49       1472.         120       5.18       33.15       119       26.21       182.5       3.01       1.72       1471.         130       5.35       33.25       129       26.27       177.0       3.19       1.94       1472.         140       5.36       33.43       139       26.41       163.8       3.36       2.18       1473.         150       5.48       33.59       149       26.53       153.0       3.52       2.41       1474.         160       5.52       33.69       159       26.60       146.5       3.67       2.65       1474.         170       5.55       33.77       169       26.66       141.0       3.81       2.89       1474.         180       5.45       33.80       179       26.70       137.7       3.95       3.14       1474.         190									
100       5.58       32.87       99       25.95       207.8       2.62       1.28       1472.         110       5.39       32.99       109       26.06       196.7       2.82       1.49       1472.         120       5.18       33.15       119       26.21       182.5       3.01       1.72       1471.         130       5.35       33.25       129       26.27       177.0       3.19       1.94       1472.         140       5.36       33.43       139       26.41       163.8       3.36       2.18       1473.         150       5.48       33.59       149       26.53       153.0       3.52       2.41       1474.         160       5.52       33.69       159       26.60       146.5       3.67       2.65       1474.         170       5.55       33.77       169       26.66       141.0       3.81       2.89       1474.         180       5.45       33.80       179       26.70       137.7       3.95       3.14       1474.         190       5.36       33.83       189       26.73       134.5       4.09       3.39       1474.         200 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
110       5.39       32.99       109       26.06       196.7       2.82       1.49       1472.         120       5.18       33.15       119       26.21       182.5       3.01       1.72       1471.         130       5.35       33.25       129       26.27       177.0       3.19       1.94       1472.         140       5.36       33.43       139       26.41       163.8       3.36       2.18       1473.         150       5.48       33.59       149       26.53       153.0       3.52       2.41       1474.         160       5.52       33.69       159       26.60       146.5       3.67       2.65       1474.         170       5.55       33.77       169       26.66       141.0       3.81       2.89       1474.         180       5.45       33.80       179       26.70       137.7       3.95       3.14       1474.         190       5.36       33.83       189       26.73       134.5       4.09       3.39       1474.         200       5.27       33.84       199       26.75       132.8       4.22       3.66       1474.         220 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
120       5.18       33.15       119       26.21       182.5       3.01       1.72       1471.         130       5.35       33.25       129       26.27       177.0       3.19       1.94       1472.         140       5.36       33.43       139       26.41       163.8       3.36       2.18       1473.         150       5.48       33.59       149       26.53       153.0       3.52       2.41       1474.         160       5.52       33.69       159       26.60       146.5       3.67       2.65       1474.         170       5.55       33.77       169       26.66       141.0       3.81       2.89       1474.         180       5.45       33.80       179       26.70       137.7       3.95       3.14       1474.         190       5.36       33.83       189       26.73       134.5       4.09       3.39       1474.         200       5.27       33.84       199       26.75       132.8       4.22       3.66       1474.         210       5.21       33.85       209       26.76       131.5       4.36       3.94       1474.         230 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
130       5.35       33.25       129       26.27       177.0       3.19       1.94       1472.         140       5.36       33.43       139       26.41       163.8       3.36       2.18       1473.         150       5.48       33.59       149       26.53       153.0       3.52       2.41       1474.         160       5.52       33.69       159       26.60       146.5       3.67       2.65       1474.         170       5.55       33.77       169       26.66       141.0       3.81       2.89       1474.         180       5.45       33.80       179       26.70       137.7       3.95       3.14       1474.         190       5.36       33.83       189       26.73       134.5       4.09       3.39       1474.         200       5.27       33.84       199       26.75       132.8       4.22       3.66       1474.         210       5.21       33.85       209       26.76       131.5       4.36       3.94       1474.         220       5.15       33.85       218       26.77       130.9       4.49       4.23       1474.         230 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
140       5.36       33.43       139       26.41       163.8       3.36       2.18       1473.         150       5.48       33.59       149       26.53       153.0       3.52       2.41       1474.         160       5.52       33.69       159       26.60       146.5       3.67       2.65       1474.         170       5.55       33.77       169       26.66       141.0       3.81       2.89       1474.         180       5.45       33.80       179       26.70       137.7       3.95       3.14       1474.         190       5.36       33.83       189       26.73       134.5       4.09       3.39       1474.         200       5.27       33.84       199       26.75       132.8       4.22       3.66       1474.         210       5.21       33.85       209       26.76       131.5       4.36       3.94       1474.         220       5.15       33.85       218       26.77       130.9       4.49       4.23       1474.         230       5.01       33.85       228       26.79       129.2       4.62       4.52       1473.         240 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
150       5.48       33.59       149       26.53       153.0       3.52       2.41       1474.         160       5.52       33.69       159       26.60       146.5       3.67       2.65       1474.         170       5.55       33.77       169       26.66       141.0       3.81       2.89       1474.         180       5.45       33.80       179       26.70       137.7       3.95       3.14       1474.         190       5.36       33.83       189       26.73       134.5       4.09       3.39       1474.         200       5.27       33.84       199       26.75       132.8       4.22       3.66       1474.         210       5.21       33.85       209       26.76       131.5       4.36       3.94       1474.         220       5.15       33.85       218       26.77       130.9       4.49       4.23       1474.         230       5.01       33.85       228       26.79       129.2       4.62       4.52       1473.         240       4.92       33.86       238       26.80       127.7       4.75       4.83       1473.         250 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
160       5.52       33.69       159       26.60       146.5       3.67       2.65       1474.         170       5.55       33.77       169       26.66       141.0       3.81       2.89       1474.         180       5.45       33.80       179       26.70       137.7       3.95       3.14       1474.         190       5.36       33.83       189       26.73       134.5       4.09       3.39       1474.         200       5.27       33.84       199       26.75       132.8       4.22       3.66       1474.         210       5.21       33.85       209       26.76       131.5       4.36       3.94       1474.         220       5.15       33.85       218       26.77       130.9       4.49       4.23       1474.         230       5.01       33.85       228       26.79       129.2       4.62       4.52       1473.         240       4.92       33.86       238       26.80       127.7       4.75       4.83       1473.         250       4.80       33.87       258       26.84       124.6       5.00       5.47       1472.         270 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3.36</td> <td>2.18</td> <td>1473.</td>							3.36	2.18	1473.
170       5.55       33.77       169       26.66       141.0       3.81       2.89       1474.         180       5.45       33.80       179       26.70       137.7       3.95       3.14       1474.         190       5.36       33.83       189       26.73       134.5       4.09       3.39       1474.         200       5.27       33.84       199       26.75       132.8       4.22       3.66       1474.         210       5.21       33.85       209       26.76       131.5       4.36       3.94       1474.         220       5.15       33.85       218       26.77       130.9       4.49       4.23       1474.         230       5.01       33.85       228       26.79       129.2       4.62       4.52       1473.         240       4.92       33.86       238       26.80       127.7       4.75       4.83       1473.         250       4.80       33.87       258       26.82       126.1       4.87       5.15       1473.         260       4.69       33.87       258       26.84       124.6       5.00       5.47       1472.         270 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
180       5.45       33.80       179       26.70       137.7       3.95       3.14       1474.         190       5.36       33.83       189       26.73       134.5       4.09       3.39       1474.         200       5.27       33.84       199       26.75       132.8       4.22       3.66       1474.         210       5.21       33.85       209       26.76       131.5       4.36       3.94       1474.         220       5.15       33.85       218       26.77       130.9       4.49       4.23       1474.         230       5.01       33.85       228       26.79       129.2       4.62       4.52       1473.         240       4.92       33.86       238       26.80       127.7       4.75       4.83       1473.         250       4.80       33.86       248       26.82       126.1       4.87       5.15       1473.         260       4.69       33.87       258       26.84       124.6       5.00       5.47       1472.         270       4.68       33.87       268       26.84       124.6       5.12       5.81       1473.         280 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1474.</td>									1474.
190       5.36       33.83       189       26.73       134.5       4.09       3.39       1474.         200       5.27       33.84       199       26.75       132.8       4.22       3.66       1474.         210       5.21       33.85       209       26.76       131.5       4.36       3.94       1474.         220       5.15       33.85       218       26.77       130.9       4.49       4.23       1474.         230       5.01       33.85       228       26.79       129.2       4.62       4.52       1473.         240       4.92       33.86       238       26.80       127.7       4.75       4.83       1473.         250       4.80       33.86       248       26.82       126.1       4.87       5.15       1473.         260       4.69       33.87       258       26.84       124.6       5.00       5.47       1472.         270       4.68       33.87       268       26.84       124.6       5.12       5.81       1473.         280       4.55       33.88       278       26.86       122.5       5.25       6.15       1472.         290 </td <td></td> <td></td> <td></td> <td></td> <td>26.66</td> <td>141.0</td> <td>3.81</td> <td>2.89</td> <td></td>					26.66	141.0	3.81	2.89	
200       5.27       33.84       199       26.75       132.8       4.22       3.66       1474.         210       5.21       33.85       209       26.76       131.5       4.36       3.94       1474.         220       5.15       33.85       218       26.77       130.9       4.49       4.23       1474.         230       5.01       33.85       228       26.79       129.2       4.62       4.52       1473.         240       4.92       33.86       238       26.80       127.7       4.75       4.83       1473.         250       4.80       33.86       248       26.82       126.1       4.87       5.15       1473.         260       4.69       33.87       258       26.84       124.6       5.00       5.47       1472.         270       4.68       33.87       268       26.84       124.6       5.12       5.81       1473.         280       4.55       33.88       278       26.86       122.5       5.25       6.15       1472.         290       4.47       33.88       288       26.87       121.6       5.37       6.51       1472.							3.95	3.14	
210       5.21       33.85       209       26.76       131.5       4.36       3.94       1474.         220       5.15       33.85       218       26.77       130.9       4.49       4.23       1474.         230       5.01       33.85       228       26.79       129.2       4.62       4.52       1473.         240       4.92       33.86       238       26.80       127.7       4.75       4.83       1473.         250       4.80       33.86       248       26.82       126.1       4.87       5.15       1473.         260       4.69       33.87       258       26.84       124.6       5.00       5.47       1472.         270       4.68       33.87       268       26.84       124.6       5.12       5.81       1473.         280       4.55       33.88       278       26.86       122.5       5.25       6.15       1472.         290       4.47       33.88       288       26.87       121.6       5.37       6.51       1472.					26.73	134.5	4.09	3.39	
220       5.15       33.85       218       26.77       130.9       4.49       4.23       1474.         230       5.01       33.85       228       26.79       129.2       4.62       4.52       1473.         240       4.92       33.86       238       26.80       127.7       4.75       4.83       1473.         250       4.80       33.86       248       26.82       126.1       4.87       5.15       1473.         260       4.69       33.87       258       26.84       124.6       5.00       5.47       1472.         270       4.68       33.87       268       26.84       124.6       5.12       5.81       1473.         280       4.55       33.88       278       26.86       122.5       5.25       6.15       1472.         290       4.47       33.88       288       26.87       121.6       5.37       6.51       1472.								3.66	1474.
230       5.01       33.85       228       26.79       129.2       4.62       4.52       1473.         240       4.92       33.86       238       26.80       127.7       4.75       4.83       1473.         250       4.80       33.86       248       26.82       126.1       4.87       5.15       1473.         260       4.69       33.87       258       26.84       124.6       5.00       5.47       1472.         270       4.68       33.87       268       26.84       124.6       5.12       5.81       1473.         280       4.55       33.88       278       26.86       122.5       5.25       6.15       1472.         290       4.47       33.88       288       26.87       121.6       5.37       6.51       1472.					26.76		4.36	3.94	1474.
240       4.92       33.86       238       26.80       127.7       4.75       4.83       1473.         250       4.80       33.86       248       26.82       126.1       4.87       5.15       1473.         260       4.69       33.87       258       26.84       124.6       5.00       5.47       1472.         270       4.68       33.87       268       26.84       124.6       5.12       5.81       1473.         280       4.55       33.88       278       26.86       122.5       5.25       6.15       1472.         290       4.47       33.88       288       26.87       121.6       5.37       6.51       1472.						130.9	4.49	4.23	1474.
250       4.80       33.86       248       26.82       126.1       4.87       5.15       1473.         260       4.69       33.87       258       26.84       124.6       5.00       5.47       1472.         270       4.68       33.87       268       26.84       124.6       5.12       5.81       1473.         280       4.55       33.88       278       26.86       122.5       5.25       6.15       1472.         290       4.47       33.88       288       26.87       121.6       5.37       6.51       1472.					26.79			4.52	1473.
260       4.69       33.87       258       26.84       124.6       5.00       5.47       1472.         270       4.68       33.87       268       26.84       124.6       5.12       5.81       1473.         280       4.55       33.88       278       26.86       122.5       5.25       6.15       1472.         290       4.47       33.88       288       26.87       121.6       5.37       6.51       1472.					26.80	127.7	4.75	4.83	1473.
270     4.68     33.87     268     26.84     124.6     5.12     5.81     1473.       280     4.55     33.88     278     26.86     122.5     5.25     6.15     1472.       290     4.47     33.88     288     26.87     121.6     5.37     6.51     1472.					26.82	126.1	4.87	5.15	1473.
280 4.55 33.88 278 26.86 122.5 5.25 6.15 1472. 290 4.47 33.88 288 26.87 121.6 5.37 6.51 1472.				258		124.6	5.00	5.47	1472.
290 4.47 53.88 288 26.87 121.6 5.37 6.51 1472.					26.84	124.6	5.12	5.81	1473.
					26.86	122.5	5.25	6.15	
300 4.39 33.89 298 26.89 120.2 5.49 6.87 1472.				288	26.87	121.6	5.37	6.51	1472.
	300	4.39	33.89	298	26.89	120.2	5.49	6.87	1472.



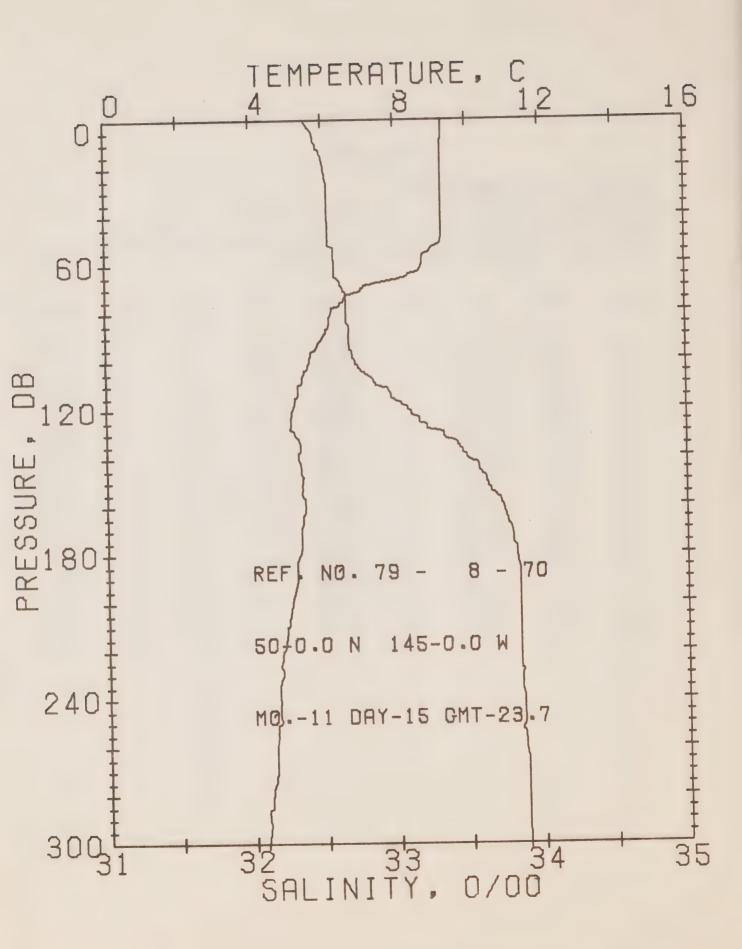
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 69 DATE 15/11/79

POSITION 50- .0N, 145- .0W GMT 17.1 STATION P

RESULTS OF STP CAST 331 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	9.28	32.58	0	25.20	277.2	•00	•00	1485.
10	9.28	32.58	10	25.20	277.4	•28	.01	1485.
20	9.28	32.58	20	25.20	277.5	•55	•06	1485.
30	9.29	32.58	30	25.20	277.9	•83	.13	1485.
50	9.31	32.58	50	25.20	278.5	1.39	•35	1486.
75	7.22	32.67	75	25.58	242.6	2.07	•78	1478.
100	5.58	32.87	99	25.95	207.8	2.62	1.28	1472.
125	5.29	33.22	124	26.26	178.6	3.10	1.83	1472.
150	5.48	33.59	149	26.53	153.0	3.52	2.41	1474.
175	5.50	33.79	174	26.68	138.9	3.88	3.01	1474.
200	5.27	33.84	199	26.75	132.8	4.22	3.66	1474.
225	5.12	33.86	223	26.78	129.9	4.55	4.37	1474.
250	4.80	33.86	248	26.82	126.1	4.87	5.15	1473.
300	4.39	33.89	298	26.89	120.2	5.49	6.87	1472.
400	3.99	33.94	397	26.97	113.0	6.66	11.06	1472.
500	3.90	34.07	496	27.08	103.5	7.74	15.98	1473.
600	3.74	34.15	595	27.16	96.0	8.73	21.54	1474.
800	3.32	34.28	793	27.30	83.6	10.51	34.19	1476.
1000	2.97	34.37	990	27.41	74.5	12.09	48.67	1478.
1200	2.70	34.42	1188	27.47	68.7	13.52	64.71	1480.



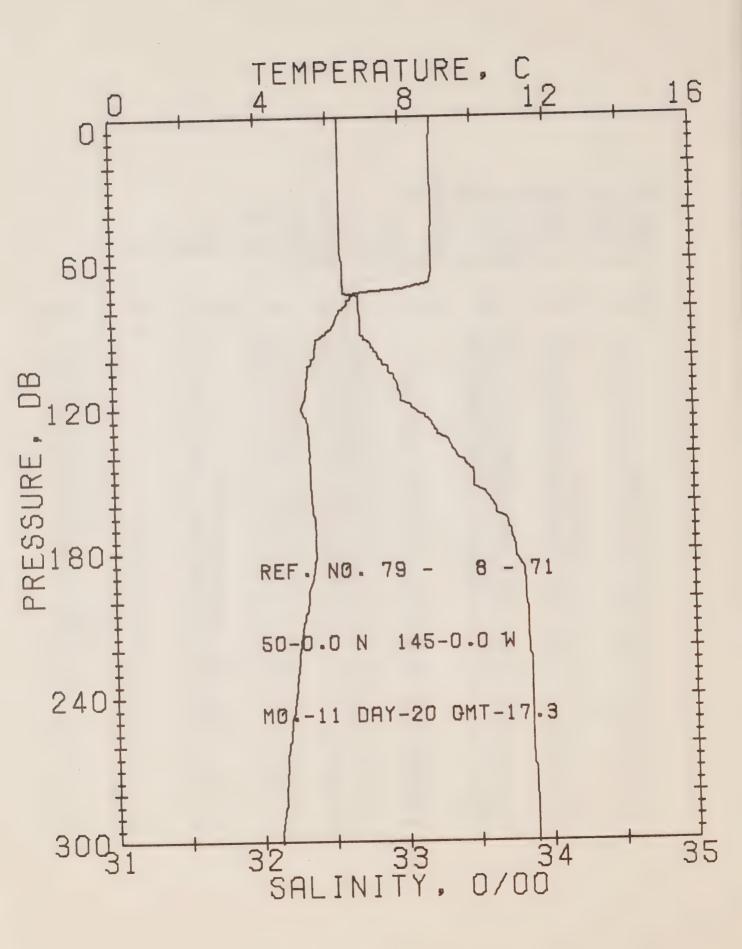
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 70 DATE 15/11/79

POSITION 50- .0N, 145- ,0W GMT 23.7 STATION P

RESULTS OF STP CAST 198 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS TEMP SAL DEPTH SIGMA SVA DELTA POT.  T D FN	SOUND
	1/105
0 9.32 32.38 0 25.04 292.6 .00 .00 10 9.30 32.45 10 25.10 286.9 .29 .01	1485.
20 9.30 32.51 20 25.15 283.0 .57 .06	1485.
	1485. 1485.
40     9.30     32.53     40     25.16     281.9     1.14     .23       50     9.29     32.54     50     25.17     281.2     1.42     .36	1485.
60 8.74 32.58 60 25.29 270.2 1.69 .51	1484.
70 7.07 32.63 70 25.57 243.5 1.95 .69	1477.
80 6.22 32.66 80 25.70 230.7 2.19 .87	1474.
90 5.97 32.67 89 25.74 227.2 2.42 1.06	1473.
100 5.59 32.71 99 25.82 219.8 2.64 1.28	1472.
110 5.29 32.86 109 25.97 205.3 2.85 1.51	1471.
120 5.13 33.08 119 26.16 187.2 3.05 1.74	1471.
130 5.18 33.33 129 26.36 169.1 3.23 1.96	1472.
140 5.29 33.49 139 26.47 158.5 3.39 2.19	1472.
150 5.40 33.62 149 26.56 150.2 3.55 2.42	1473.
160 5.47 33.73 159 20.64 142.9 3.69 2.65	1474.
170 5.34 33.79 169 26.70 136.8 3.83 2.88	1474.
180 5.29 33.82 179 26.73 134.3 3.97 3.12	1474.
190 5.20 33.84 189 26.76 131.9 4.10 3.37	1473.
200 5.05 33.84 199 26.77 130.3 4.23 3.64	1473.
210 4.92 33.84 209 26.79 128.9 4.36 3.91	1473.
220 4.77 33.84 218 26.81 127.4 4.49 4.19	1472.
230 4.78 33.85 228 26.81 126.8 4.62 4.48	1472.
240 4.69 33.86 238 26.83 125.1 4.74 4.78	1472.
250 4.69 33.87 248 26.84 124.5 4.87 5.09	1472.
260 4.57 33.87 258 26.85 123.3 4.99 5.41	1472.
270 4.56 33.88 268 26.86 122.6 5.11 5.75	1472.
280 4.45 33.88 278 26.87 121.5 5.24 6.09	1472.
290 4.35 33.88 288 26.88 120.5 5.36 6.44	1472.
300 4.30 33.89 298 26.90 119.3 5.48 6.80	1472.



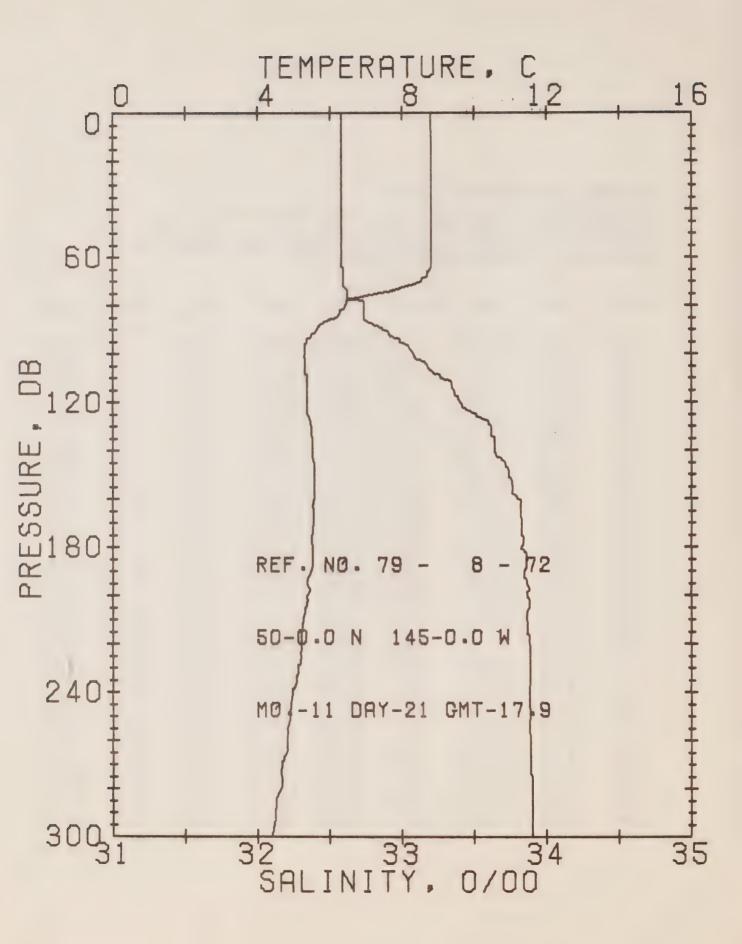
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 71 DATE 20/11/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 172 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	0.0110
0	8.87	32.58	0	25.27	271.1	•00	.00	1483.
10	8.86	32.58	10	25.27	271.1	•27	.01	1483.
20	8.86	32.58	20	25.27	271.3	•54	.06	1483.
30	8.87	32.58	30	25.27	271.5	.81	.12	1484.
40	8.87	32.58	40	25.27	271.8	1.09	.22	1484.
50	8.86	32.58	50	25.27	271.8	1.36	.35	1484.
60	8'86	32.59	60	25.28	271.3	1.63	•50	1484.
70	8.31	32.59	70	25.36	263.4	1.90	•68	1482.
80	6.30	32.70	80	25.72	228.8	2.14	.86	1475.
90	5.85	32.71	89	25.79	222.8	2.36	1.06	1473.
100	5.49	32.84	99	25.93	209.0	2.58	1.26	1472.
110	5.34	32.96	109	26.05	198.4	2.78	1.48	1471.
120	5.18	33.06	119	26.14	189.2	2.98	1.71	1471.
130	5.37	33.23	129	26.25	178.8	3.16	1:94	1472.
140	5.41	33.37	139	26.36	168.9	3.33	2.18	1473.
150	5.41	33.49	149	26.46	160.0	3.50	2.42	1473.
160	5.46	33.61	159	26.54	151.7	3.65	2.67	1474.
170	5.53	33.72	169	26.62	144.5	3.80	2.92	1474.
180	5.54	33.77	179	26.66	141.0	3.94	3.17	1475.
190	5.45	33.82	189	26.71	136.3	4.08	3.43	1474.
200	5.29	33.83	199	26.74	133.7	4.21	3.70	1474.
210	5.14	33.84	209	26.76	131.5	4.35	3.98	1473.
220	5.05	33.85	218	26.78	129.8	4.48	4.26	1473.
230	4.97	33.86	228	26.80	128.2	4.61	4.56	1473.
240	4.90	33.86	238	26.81	127.5	4.73	4.86	1473.
250	4.77	33.86	248	26.82	126.2	4.86	5.18	1473.
260	4.69	33.86	258	26.83	125.4	4.99	5.51	1472.
270 280	4.64 4.58	33.88	268	26.85	123.4	5.11	5.84	1472.
	4.50	33.88	278	26.86	122.9	5.24	6.19	1472.
290 300	4.45	33.89 33.89	288 298	26.87 26.88	121.5	5.36 5.48	6.54	1472. 1472.
300	7 • 7 3	33.09	230	20.00	120.9	3.40	0.91	1412.



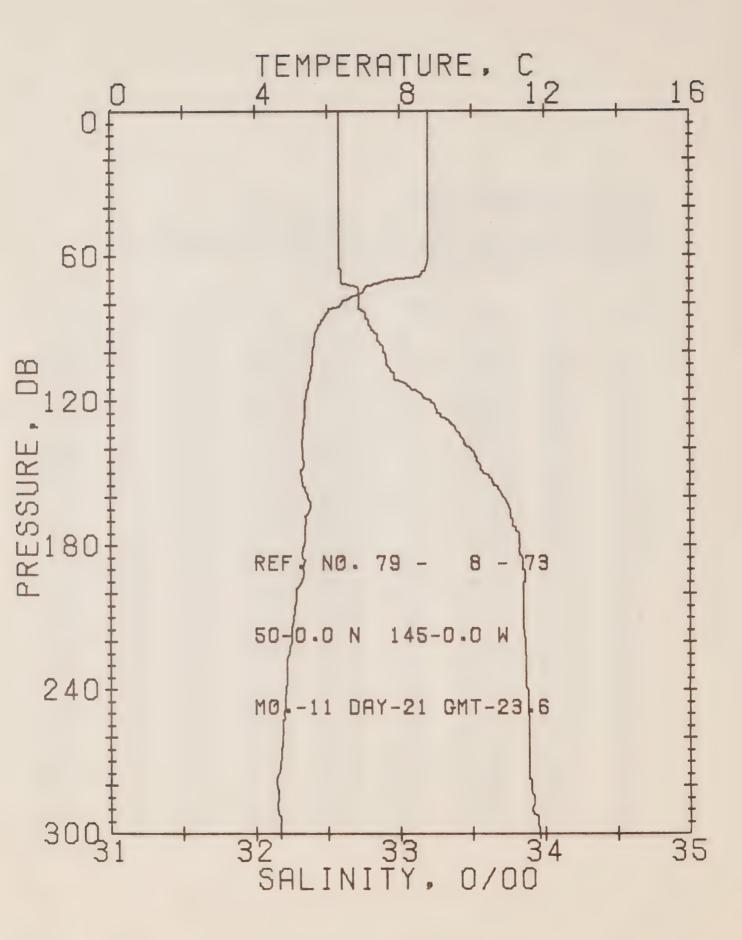
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 72 DATE 21/11/79

POSITION 50- .0N, 145- .0W GMT 17.9 STATION P

RESULTS OF STP CAST 198 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	8.81	32.58	0	25.28	270.2	•00	•00	1483.
10	8.82	32.58	10	25.28	270.5	•27	.01	1483.
20	8.82	32.58	20	25.28	270.7	•54	.06	1483.
30	8.82	32.58	30	25.28	270.8	•81	•12	1483.
40	8.83	32.58	40	25.28	271.2	1.08	.22	1484.
50	8.82	32.58	50	25.28	271.2	1.35	•35	1484.
60	8.82	32.58	60	25.28	271.3	1.63	•50	1484.
70	8.53	32.59	70	25.33	266.5	1.90	•68	1483.
80	6.44	32.73	80	25.73	228.2	2.14	.86	1475.
90	5.63	32.87	89	25.94	208.2	2.36	1.06	1472.
100	5.30	33.07	99	26.14	189.6	2.56	1.25	1471.
110	5.35	33.27	109	26.29	175.3	2.74	1.44	1472.
120	5.36	33.40	119	26.39	165.8	2.91	1.64	1472.
130	5.48	33.61	129	26.54	151.6	3.07	1.84	1473.
140	5.52	33.64	139	26.56	150.0	3.22	2.05	1474.
<b>1</b> 50	5.58	33.74	149	26.63	143.3	3.37	2.27	1474.
160	5.58	33.80	159	26.68	139.0	3.51	2.49	1474.
170	5.55	33.83	169	26.71	136.5	3.65	2.72	1474.
180	5.52	33.83	179	26.71	136.3	3.78	2.96	1475.
190	5.46	33.85	189	26.73	134.2	3.92	3.22	1474.
200	5.37	33.87	199	26.76	131.7	4.05	3.48	1474.
210	5.25	33.86	209	26.77	131.2	4.18	3.75	1474.
220	5.19	33.88	218	26.79	128.9	4.31	4.04	1474.
230	5.13	33.89	228	26.80	127.8	4.44	4.33	1474.
240	4.97	33.88	238	26.81	126.8	4.57	4.64	1473.
250	4.87	33.89	248	26.83	125.1	4.69	4.95	1473.
260	4.80	33.89	258	26.84	124.3	4.82	5.28	1473.
270	4.67	33.89	268	26.86	123.0	4.94	5.61	1473.
280	4.63	33.90	278	26.87	121.9	5.06	5.95	1473.
290	4.49	33.90	288	26.88	120.4	5.18	6.31	1472.
300	4.40	33.90	298	26.89	119.6	5.30	6.67	1472.



OFFSHORE OCEANOGRAPHY GROUP

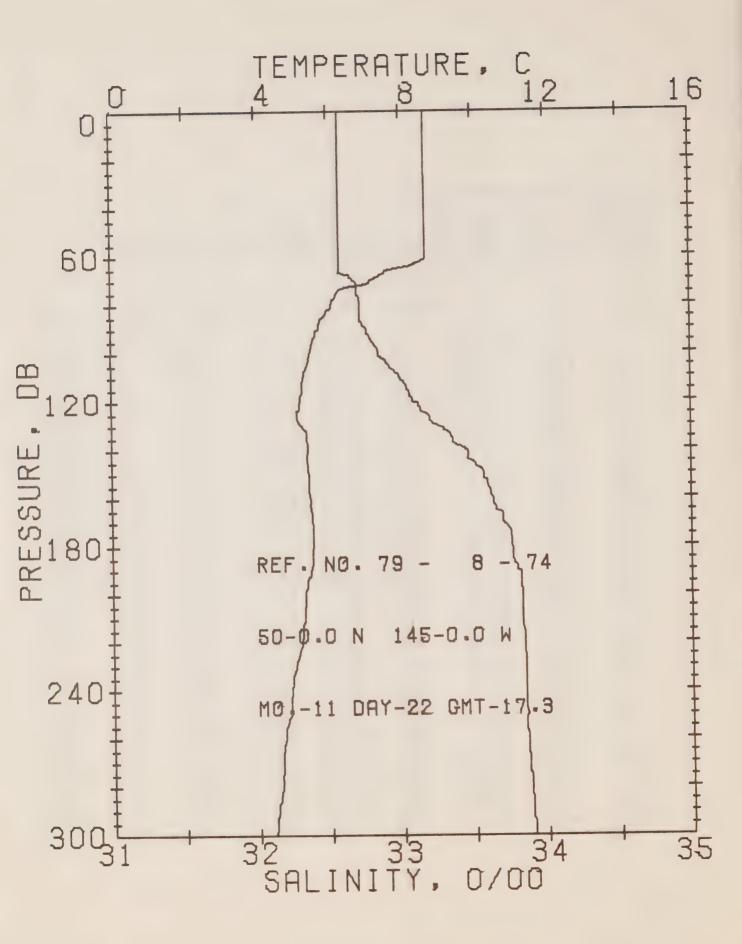
REFERENCE NO. 79-8-73

POSITION 50-.0N, 145-.0W GMT 23.6 STATION P

RESULTS OF STP CAST 192 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS         TEMP         SAL         DEPTH         SIGMA         SVA         DELTA         POT.         SOUND           0         8.79         32.58         0         25.28         269.9         .00         .00         1483.           10         8.80         32.58         10         25.28         270.2         .27         .01         1483.           20         8.80         32.58         20         25.28         270.4         .54         .06         1483.           30         8.80         32.58         30         25.28         270.6         .81         .12         1483.           50         8.80         32.58         50         25.28         270.9         1.35         .34         1484.           60         8.80         32.56         60         25.28         271.1         1.62         .50         1484.           70         7.70         32.59         70         25.45         254.9         1.89         .67         1480.           80         6.37         32.72         80         25.73         228.1         2.13         .86         1475.           90         5.72         32.80         89	201.00	TEND	CAL	DEDTH	CYCMA	CNA	E PE 1 700 A	0.07	0011110
0         8.79         32.58         0         25.28         269.9         .00         .00         1483.           10         8.80         32.58         10         25.28         270.2         .27         .01         1483.           20         8.80         32.58         20         25.28         270.4         .54         .06         1483.           30         8.80         32.58         30         25.28         270.6         .81         .12         1483.           40         8.80         32.58         40         25.28         270.8         1.08         .22         1483.           50         8.80         32.58         50         25.28         270.9         1.35         .34         1484.           60         8.80         32.59         70         25.45         254.9         1.89         .67         1480.           80         6.37         32.72         80         25.73         228.1         2.13         .86         1475.           90         5.72         32.80         89         25.87         214.5         2.35         1.05         1472.           100         5.58         32.96         109         <	PKESS	IEMP	SAL	DEPIH		SVA			SOUND
10       8'80       32.58       10       25.28       270.2       .27       .01       1483.         20       8.80       32.56       20       25.28       270.4       .54       .06       1483.         30       8.80       32.56       30       25.28       270.6       .81       .12       1483.         40       8.80       32.56       40       25.28       270.9       1.35       .34       1484.         60       8.80       32.56       60       25.28       270.9       1.35       .34       1484.         60       8.80       32.56       60       25.28       271.1       1.62       .50       1484.         70       7.70       32.59       70       25.45       254.9       1.89       .67       1480.         80       6.37       32.72       80       25.73       228.1       2.13       .86       1475.         90       5.72       32.80       89       25.87       214.5       2.35       1.05       1472.         100       5.53       32.96       109       26.02       200.6       2.76       1.47       1472.         120       5.37	0	9 70	70 Eu	0		040 0			8 4 0 79
20       8.80       32.58       20       25.28       270.4       .54       .06       1483.         30       8.80       32.58       30       25.28       270.6       .81       .12       1483.         40       8.80       32.58       40       25.28       270.8       1.08       .22       1483.         50       8.80       32.58       50       25.28       270.9       1.35       .34       1484.         60       8.80       32.58       60       25.28       271.1       1.62       .50       1484.         70       7.70       32.59       70       25.45       254.9       1.89       .67       1480.         80       6.37       32.72       80       25.73       228.1       2.13       .86       1475.         90       5.72       32.80       89       25.87       214.5       2.35       1.05       1472.         100       5.53       32.96       109       26.02       200.6       2.76       1.47       1472.         120       5.37       33.21       119       26.24       180.2       2.95       1.69       1472.         130       5.43	_								
30       8.80       32.58       30       25.28       270.6       .81       .12       1483.         40       8.80       32.58       40       25.28       270.8       1.08       .22       1483.         50       8.80       32.58       50       25.28       270.9       1.35       .34       1484.         60       8.80       32.59       70       25.45       254.9       1.89       .67       1484.         70       7.70       32.59       70       25.45       254.9       1.89       .67       1480.         80       6.37       32.72       80       25.73       228.1       2.13       .86       1475.         90       5.72       32.80       89       25.87       214.5       2.35       1.05       1472.         100       5.58       32.89       99       25.96       206.3       2.56       1.25       1472.         110       5.53       32.96       109       26.02       200.6       2.76       1.47       1472.         120       5.37       33.21       119       26.24       180.2       2.95       1.69       1472.         140       5.31 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
40       8.80       32.58       40       25.28       270.8       1.08       .22       1483.         50       8.80       32.58       50       25.28       270.9       1.35       .34       1484.         60       8.80       32.59       60       25.28       271.1       1.62       .50       1484.         70       7.70       32.59       70       25.45       254.9       1.89       .67       1480.         80       6.37       32.72       80       25.73       228.1       2.13       .86       1475.         90       5.72       32.80       89       25.87       214.5       2.35       1.05       1472.         100       5.58       32.89       99       25.96       206.3       2.56       1.25       1472.         110       5.53       33.21       119       26.24       180.2       2.95       1.69       1472.         120       5.37       33.21       119       26.36       168.7       3.13       1.91       1472.         140       5.31       33.49       139       26.47       158.8       3.29       2.14       1473.         150       5.25									
50       8.80       32.58       50       25.28       270.9       1.35       .34       1484.         60       8.80       32.56       60       25.28       271.1       1.62       .50       1484.         70       7'.70       32.59       70       25.45       254.9       1.89       .67       1480.         80       6'.37       32.72       80       25.73       228.1       2.13       .86       1475.         90       5.72       32.80       89       25.87       214.5       2.35       1.05       1472.         100       5'.58       32.89       99       25.96       206.3       2.56       1.25       1472.         110       5'.53       32.96       109       26.02       200.6       2.76       1.47       1472.         120       5'.37       33.21       119       26.24       180.2       2.95       1.69       1472.         130       5.34       33.36       129       26.36       168.7       3.13       1.91       1472.         140       5'.31       33.49       139       26.47       158.8       3.29       2.14       1473.         150									
60       8.80       32.5b       60       25.28       271.1       1.62       .50       1484         70       7'.70       32.59       70       25.45       254.9       1.89       .67       1480         80       63.7       32.72       80       25.73       228.1       2.13       .86       1475         90       5.72       32.80       89       25.87       214.5       2.35       1.05       1472         100       5.58       32.89       99       25.96       206.3       2.56       1.25       1472         110       5.53       32.96       109       26.02       200.6       2.76       1.47       1472         120       5.37       33.21       119       26.24       180.2       2.95       1.69       1472         130       5.34       33.3b       129       26.36       168.7       3.13       1.91       1472         140       5.31       33.49       139       26.47       158.8       3.29       2.14       1473         150       5.25       33.58       149       26.54       151.5       3.45       2.37       1473         160       5.45 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
70         7'.70         32.59         70         25.45         254.9         1.89         .67         1480           80         6'.37         32.72         80         25.73         228.1         2.13         .86         1475           90         5.72         32.80         89         25.87         214.5         2.35         1.05         1472           100         5'.58         32.89         99         25.96         206.3         2.56         1.25         1472           110         5'.53         32.96         109         26.02         200.6         2.76         1.47         1472           120         5'.37         33.21         119         26.24         180.2         2.95         1.69         1472.           130         5.34         33.36         129         26.36         168.7         3.13         1.91         1472.           140         5'.31         33.49         139         26.47         158.8         3.29         2.14         1473.           150         5.25         33.58         149         26.54         151.5         3.45         2.37         1473.           160         5.45         33.71									
80       6.37       32.72       80       25.73       228.1       2.13       .86       1475.         90       5.72       32.80       89       25.87       214.5       2.35       1.05       1472.         100       5.58       32.89       99       25.96       206.3       2.56       1.25       1472.         110       5.53       32.96       109       26.02       200.6       2.76       1.47       1472.         120       5.37       33.21       119       26.24       180.2       2.95       1.69       1472.         130       5.34       33.35       129       26.36       168.7       3.13       1.91       1472.         140       5.31       33.49       139       26.47       158.8       3.29       2.14       1473.         150       5.25       33.58       149       26.54       151.5       3.45       2.37       1473.         160       5.45       33.71       159       26.62       144.2       3.60       2.60       1474.         170       5.38       33.78       169       26.69       138.2       3.74       2.84       1474.         180									
90       5.72       32.80       89       25.87       214.5       2.35       1.05       1472.         100       5.58       32.89       99       25.96       206.3       2.56       1.25       1472.         110       5.53       32.96       109       26.02       200.6       2.76       1.47       1472.         120       5.37       33.21       119       26.24       180.2       2.95       1.69       1472.         130       5.34       33.3b       129       26.36       168.7       3.13       1.91       1472.         140       5.31       33.49       139       26.47       158.8       3.29       2.14       1473.         150       5.25       33.58       149       26.54       151.5       3.45       2.37       1473.         160       5.45       33.71       159       26.62       144.2       3.60       2.60       1474.         170       5.38       33.76       169       26.69       138.2       3.74       2.84       1474.         180       5.33       33.85       189       26.75       132.3       4.01       3.33       1474.         200									
100       5.58       32.89       99       25.96       206.3       2.56       1.25       1472.         110       5.53       32.96       109       26.02       200.6       2.76       1.47       1472.         120       5.37       33.21       119       26.24       180.2       2.95       1.69       1472.         130       5.34       33.3b       129       26.36       168.7       3.13       1.91       1472.         140       5.31       33.49       139       26.47       158.8       3.29       2.14       1473.         150       5.25       33.58       149       26.54       151.5       3.45       2.37       1473.         160       5.45       33.71       159       26.62       144.2       3.60       2.60       1474.         170       5.38       33.78       169       26.69       138.2       3.74       2.84       1474.         180       5.33       33.85       189       26.73       134.0       3.87       3.08       1474.         190       5.30       33.85       189       26.75       132.3       4.01       3.33       1474.         200 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
110       5.53       32.96       109       26.02       200.6       2.76       1.47       1472.         120       5.37       33.21       119       26.24       180.2       2.95       1.69       1472.         130       5.34       33.36       129       26.36       168.7       3.13       1.91       1472.         140       5.31       33.49       139       26.47       158.8       3.29       2.14       1473.         150       5.25       33.58       149       26.54       151.5       3.45       2.37       1473.         160       5.45       33.71       159       26.62       144.2       3.60       2.60       1474.         170       5.38       33.75       169       26.69       138.2       3.74       2.84       1474.         180       5.33       33.83       179       26.73       134.0       3.87       3.08       1474.         180       5.30       33.85       189       26.75       132.3       4.01       3.33       1474.         200       5.13       33.85       199       26.77       130.5       4.14       3.59       1473.         210 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
120       5.37       33.21       119       26.24       180.2       2.95       1.69       1472.         130       5.34       33.36       129       26.36       168.7       3.13       1.91       1472.         140       5.31       33.49       139       26.47       158.8       3.29       2.14       1473.         150       5.25       33.58       149       26.54       151.5       3.45       2.37       1473.         160       5.45       33.71       159       26.62       144.2       3.60       2.60       1474.         170       5.38       33.76       169       26.69       138.2       3.74       2.84       1474.         180       5.33       33.83       179       26.73       134.0       3.87       3.08       1474.         190       5.30       33.85       189       26.75       132.3       4.01       3.33       1474.         200       5.13       33.85       199       26.77       130.5       4.14       3.59       1473.         210       5.05       33.85       209       26.78       129.6       4.27       3.87       1473.         220 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
130       5.34       33.36       129       26.36       168.7       3.13       1.91       1472.         140       5.31       33.49       139       26.47       158.8       3.29       2.14       1473.         150       5.25       33.58       149       26.54       151.5       3.45       2.37       1473.         160       5.45       33.71       159       26.62       144.2       3.60       2.60       1474.         170       5.38       33.78       169       26.69       138.2       3.74       2.84       1474.         180       5.33       33.83       179       26.73       134.0       3.87       3.08       1474.         190       5.30       33.85       189       26.75       132.3       4.01       3.33       1474.         200       5.13       33.85       199       26.77       130.5       4.14       3.59       1473.         210       5.05       33.85       209       26.78       129.6       4.27       3.87       1473.         220       4.98       33.86       218       26.80       128.2       4.40       4.15       1473.         240 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
140       5.31       33.49       139       26.47       158.8       3.29       2.14       1473.         150       5.25       33.58       149       26.54       151.5       3.45       2.37       1473.         160       5.45       33.71       159       26.62       144.2       3.60       2.60       1474.         170       5.38       33.78       169       26.69       138.2       3.74       2.84       1474.         180       5.33       33.83       179       26.73       134.0       3.87       3.08       1474.         190       5.30       33.85       189       26.75       132.3       4.01       3.33       1474.         200       5.13       33.85       199       26.77       130.5       4.14       3.59       1473.         210       5.05       33.85       209       26.78       129.6       4.27       3.87       1473.         220       4.98       33.86       218       26.80       128.2       4.40       4.15       1473.         230       4.86       33.87       228       26.82       126.2       4.52       4.44       1473.         250 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
150       5.25       33.58       149       26.54       151.5       3.45       2.37       1473.         160       5.45       33.71       159       26.62       144.2       3.60       2.60       1474.         170       5.38       33.78       169       26.69       138.2       3.74       2.84       1474.         180       5.33       33.83       179       26.73       134.0       3.87       3.08       1474.         190       5.30       33.85       189       26.75       132.3       4.01       3.33       1474.         200       5.13       33.85       199       26.77       130.5       4.14       3.59       1473.         210       5.05       33.85       209       26.78       129.6       4.27       3.87       1473.         220       4.98       33.86       218       26.80       128.2       4.40       4.15       1473.         230       4.86       33.87       228       26.82       126.2       4.52       4.44       1473.         250       4.77       33.88       248       26.83       125.6       4.65       4.74       1473.         260 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
160       5.45       33.71       159       26.62       144.2       3.60       2.60       1474.         170       5.38       33.76       169       26.69       138.2       3.74       2.84       1474.         180       5.33       33.83       179       26.73       134.0       3.87       3.08       1474.         190       5.30       33.85       189       26.75       132.3       4.01       3.33       1474.         200       5.13       33.85       199       26.77       130.5       4.14       3.59       1473.         210       5.05       33.85       209       26.78       129.6       4.27       3.87       1473.         220       4.98       33.86       218       26.80       128.2       4.40       4.15       1473.         230       4.86       33.87       228       26.82       126.2       4.52       4.44       1473.         240       4.82       33.87       238       26.83       125.6       4.65       4.74       1473.         250       4.77       33.88       248       26.85       123.6       4.90       5.38       1473.         260 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
170       5.38       33.78       169       26.69       138.2       3.74       2.84       1474.         180       5.33       33.83       179       26.73       134.0       3.87       3.08       1474.         190       5.30       33.85       189       26.75       132.3       4.01       3.33       1474.         200       5.13       33.85       199       26.77       130.5       4.14       3.59       1473.         210       5.05       33.85       209       26.78       129.6       4.27       3.87       1473.         220       4.98       33.86       218       26.80       128.2       4.40       4.15       1473.         230       4.86       33.87       228       26.82       126.2       4.52       4.44       1473.         240       4.82       33.87       238       26.83       125.6       4.65       4.74       1473.         250       4.77       33.88       248       26.84       124.7       4.77       5.05       1473.         260       4.73       33.89       258       26.85       123.6       4.90       5.38       1473.         270 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
180       5.33       33.83       179       26.73       134.0       3.87       3.08       1474.         190       5.30       33.85       189       26.75       132.3       4.01       3.33       1474.         200       5.13       33.85       199       26.77       130.5       4.14       3.59       1473.         210       5.05       33.85       209       26.78       129.6       4.27       3.87       1473.         220       4.98       33.86       218       26.80       128.2       4.40       4.15       1473.         230       4.86       33.87       228       26.82       126.2       4.52       4.44       1473.         240       4.82       33.87       238       26.83       125.6       4.65       4.74       1473.         250       4.77       33.88       248       26.84       124.7       4.77       5.05       1473.         260       4.73       33.89       258       26.85       123.6       4.90       5.38       1473.         270       4.67       33.89       268       26.87       121.4       5.14       6.05       1472.         280 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
190       5.30       33.85       189       26.75       132.3       4.01       3.33       1474.         200       5.13       33.85       199       26.77       130.5       4.14       3.59       1473.         210       5.05       33.85       209       26.78       129.6       4.27       3.87       1473.         220       4.98       33.86       218       26.80       128.2       4.40       4.15       1473.         230       4.86       33.87       228       26.82       126.2       4.52       4.44       1473.         240       4.82       33.87       238       26.83       125.6       4.65       4.74       1473.         250       4.77       33.88       248       26.84       124.7       4.77       5.05       1473.         260       4.73       33.89       258       26.85       123.6       4.90       5.38       1473.         270       4.67       33.89       268       26.86       123.0       5.02       5.71       1473.         280       4.58       33.90       278       26.87       121.4       5.14       6.05       1472.         290 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>									
200       5.13       33.85       199       26.77       130.5       4.14       3.59       1473.         210       5.05       33.85       209       26.78       129.6       4.27       3.87       1473.         220       4.98       33.86       218       26.80       128.2       4.40       4.15       1473.         230       4.86       33.87       228       26.82       126.2       4.52       4.44       1473.         240       4.82       33.87       238       26.83       125.6       4.65       4.74       1473.         250       4.77       33.88       248       26.84       124.7       4.77       5.05       1473.         260       4.73       33.89       258       26.85       123.6       4.90       5.38       1473.         270       4.67       33.89       268       26.86       123.0       5.02       5.71       1473.         280       4.58       33.90       278       26.87       121.4       5.14       6.05       1472.         290       4.58       33.91       288       26.88       120.7       5.27       6.40       1473.									
210       5.05       33.85       209       26.78       129.6       4.27       3.87       1473.         220       4'.98       33.86       218       26.80       128.2       4.40       4.15       1473.         230       4.86       33.87       228       26.82       126.2       4.52       4.44       1473.         240       4.82       33.87       238       26.83       125.6       4.65       4.74       1473.         250       4'.77       33.88       248       26.84       124.7       4.77       5.05       1473.         260       4.73       33.89       258       26.85       123.6       4.90       5.38       1473.         270       4.67       33.89       268       26.86       123.0       5.02       5.71       1473.         280       4.58       33.90       278       26.87       121.4       5.14       6.05       1472.         290       4.58       33.91       288       26.88       120.7       5.27       6.40       1473.									
220       4.98       33.86       218       26.80       128.2       4.40       4.15       1473.         230       4.86       33.87       228       26.82       126.2       4.52       4.44       1473.         240       4.82       33.87       238       26.83       125.6       4.65       4.74       1473.         250       4.77       33.88       248       26.84       124.7       4.77       5.05       1473.         260       4.73       33.89       258       26.85       123.6       4.90       5.38       1473.         270       4.67       33.89       268       26.86       123.0       5.92       5.71       1473.         280       4.58       33.90       278       26.87       121.4       5.14       6.05       1472.         290       4.58       33.91       288       26.88       120.7       5.27       6.40       1473.				-					
230       4.86       33.87       228       26.82       126.2       4.52       4.44       1473.         240       4.82       33.87       238       26.83       125.6       4.65       4.74       1473.         250       4.77       33.88       248       26.84       124.7       4.77       5.05       1473.         260       4.73       33.89       258       26.85       123.6       4.90       5.38       1473.         270       4.67       33.89       268       26.86       123.0       5.02       5.71       1473.         280       4.58       33.90       278       26.87       121.4       5.14       6.05       1472.         290       4.58       33.91       288       26.88       120.7       5.27       6.40       1473.									
240       4.82       33.87       238       26.83       125.6       4.65       4.74       1473.         250       4.77       33.88       248       26.84       124.7       4.77       5.05       1473.         260       4.73       33.89       258       26.85       123.6       4.90       5.38       1473.         270       4.67       33.89       268       26.86       123.0       5.02       5.71       1473.         280       4.58       33.90       278       26.87       121.4       5.14       6.05       1472.         290       4.58       33.91       288       26.88       120.7       5.27       6.40       1473.									
250       4'.77       33.88       248       26.84       124.7       4.77       5.05       1473.         260       4.73       33.89       258       26.85       123.6       4.90       5.38       1473.         270       4.67       33.89       268       26.86       123.0       5.02       5.71       1473.         280       4.58       33.90       278       26.87       121.4       5.14       6.05       1472.         290       4.58       33.91       288       26.88       120.7       5.27       6.40       1473.									
260     4.73     33.89     258     26.85     123.6     4.90     5.38     1473.       270     4.67     33.89     268     26.86     123.0     5.02     5.71     1473.       280     4.58     33.90     278     26.87     121.4     5.14     6.05     1472.       290     4.58     33.91     288     26.88     120.7     5.27     6.40     1473.									
270     4.67     33.89     268     26.86     123.0     5.02     5.71     1473.       280     4.58     33.90     278     26.87     121.4     5.14     6.05     1472.       290     4.58     33.91     288     26.88     120.7     5.27     6.40     1473.		4.73							
280 4.58 33.90 278 26.87 121.4 5.14 6.05 1472. 290 4.58 33.91 288 26.88 120.7 5.27 6.40 1473.		4.67							
290 4.58 33.91 288 26.88 120.7 5.27 6.40 1473.	280	4.58	33.90	278					
	290	4.58	33.91	288					
200 4.01 23.70 270 20.71 110.2 3.33 0.70 14/3.	300	4.67	33.96	298	26.91	118.2	5.38	6.76	1473.



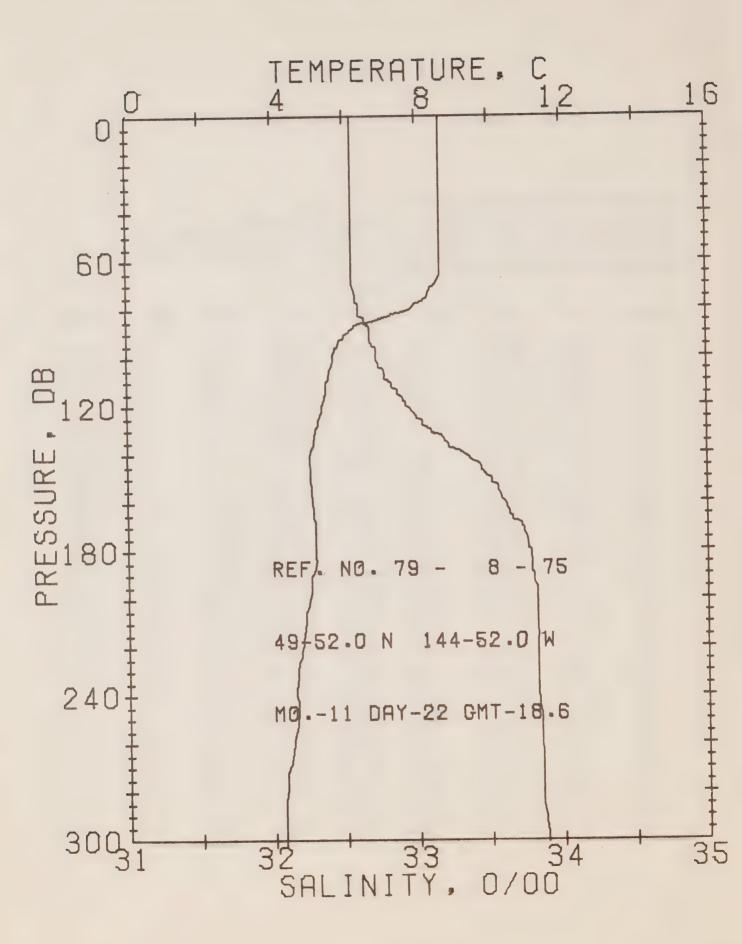
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 74 DATE 22/11/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 189 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	8.70	32.58	0	25.29	268.6	•00	.00	1482.
10	8.70	32.58	10	25.29	268.8	•27	.01	1483.
20	8.70	32.58	20	25.29	268.9	•54	• 05	1483.
30	8.71	32.58	30	25.29	269.2	•81	.12	1483.
40	8.71	32.58	40	25.29	269.4	1.08	.22	1483.
50	8.72	32.58	50	25.29	269.7	1.35	• 34	1483.
60	8.72	32.58	60	25.29	269.8	1.62	•49	1483.
70	7.18	32.67	70	25.58	242.0	1.87	•67	1478.
80	6.09	32.72	80	25.77	224.7	2.10	•84	1474.
90	5.72	32.76	89	25.84	217.5	2.33	1.03	1472.
100	5.47	32.85	99	25.94	208.0	2.54	1.24	1472.
110	5.29	32.99	109	26.07	195.6	2.74	1.46	1471.
120	5.19	33.08	119	26.16	187.9	2.93	1.68	1471.
130	5.24	33.25	129	26.29	175.8	3.11	1.91	1472.
140	5.41	33.45	139	26.42	162.9	3.28	2.14	1473.
150	5.43	33.57	149	26.52	154.3	3.44	2.38	1473.
160	5.47	33.62	159	26.55	150.7	3.59	2.62	1474.
170	5.52	33.70	169	26.61	145.8	3.74	2.87	1474.
180	5.54	33.76	179	26.66	141.4	3.89	3.12	1474.
190	5.47	33.80	189	26.69	138.0	4.03	3.39	1474.
200	5.31	33.83	199	26.74	134.0	4.16	3.66	1474.
210	5.28	33.83	209	26.74	133.7	4.30	3.94	1474.
220	5.19	33.84	218	26.76	132.1	4.43	4.23	1474.
230 240	5.01 4.92	33.85 33.85	228 238	26.79	129.4	4.56	4.53	1473.
250	4.87	33.86	248	26.80 26.81	128.5 127.3	4.69	4.84 5.16	1473. 1473.
260	4.71	33.86	258	26.83	125.6	4.94	5.49	1473.
270	4.64	33.87	268	26.84	124.2	5.07	5.82	1472.
280	4.61	33.88	278	26.85	123.2	5.19	6.17	1472.
290	4.50	33.89	288	26.87	121.4	5.31	6.53	1472.
300	4.40	33.90	298	26.89	119.6	5.43	6.89	1472.
300	7.70	33.70	270	20.09	112.0	5.45	0.09	1416.



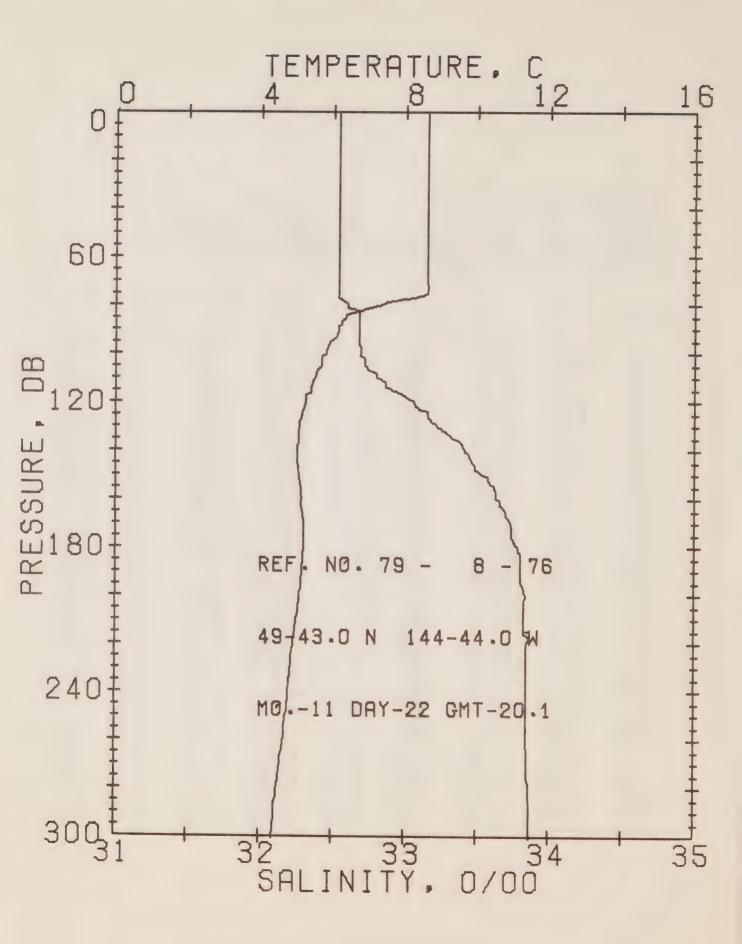
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 75

POSITION 49-52.0N, 144-52.0W GMT 18.6 STATION E3

RESULTS OF STP CAST 168 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	8.66	32.55	0	25.28	270.2	•00	.00	1482.
10	8.67	32.55	10	25.28	270.6	•27	.01	1482.
20	8.67	32.55	20	25.28	270.7	•54	•06	1483.
30	8.67	32.55	30	25.28	270.9	•81	•12	1483.
40	8.67	32.55	40	25.28	271.0	1.08	.22	1483.
50	8.67	32.55	50	25.28	271.2	1.35	• 35	1483.
60	8.67	32.55	60	25.28	271.4	1.63	•50	1483.
70	8.50	32.55	70	25.30	269.1	1.90	•68	1483.
80	7.84	32.60	80	25.44	256.2	2.16	.88	1480.
90	6.07	32.67	89	25.73	228.3	2.40	1.09	1474.
100	5.68	32.72	99	25.82	220.1	2.62	1.30	1472.
110	5.49	32.81	109	25.91	211.3	2.84	1.53	1472.
120	5.36	32.93	119	26.02	201.0	3.05	1.77	1472.
130	5.17	33.09	129	26.17	187.0	3.24	2.02	1471.
140	5.03	33.32	139	26.37	168.0	3.42	2.27	1471.
150	5.04	33.51	149	26.51	154.3	3.58	2.50	1472.
160	5.10	33.60	159	26.58	148.3	3.73	2.74	1472.
170	5.18	33.72	169	26.66	140.4	3.87	2.99	1473.
180	5.17	33.78	179	26.71	135.9	4.01	3.23	1473.
190	5.08	33.80	189	26.74	133.5	4.15	3.49	1473.
200	4.98	33.82	199	26.77	131.0	4.28	3.75	1473.
210	4.87	33.82	209	26.78	129.9	4.41	4.02	1472.
220	4.78	33.82	218	26.79	128.9	4.54	4.31	1472.
230	4.65	33.82	228	26.80	127.6	4.67	4.60	1472.
240	4.59	33.82	238	26.81	127.1	4.80	4.91	1472.
250	4.61	33.84	248	26.82	125.9	4.92	5.22	1472.
260	4.49	33.84	258	26.84	124.6	5.05	5.55	1472.
270	4.36	33.85	268	26.86	122.6	5.17	5.88	1471.
280	4.30	33.85	278	26.86	122.1	5.29	6.22	1471.
290	4.26	33.87	288	26.88	120.5	5.41	6.58	1471.
300	4.26	33.88	298	26.89	119.6	5.53	6.94	1471.



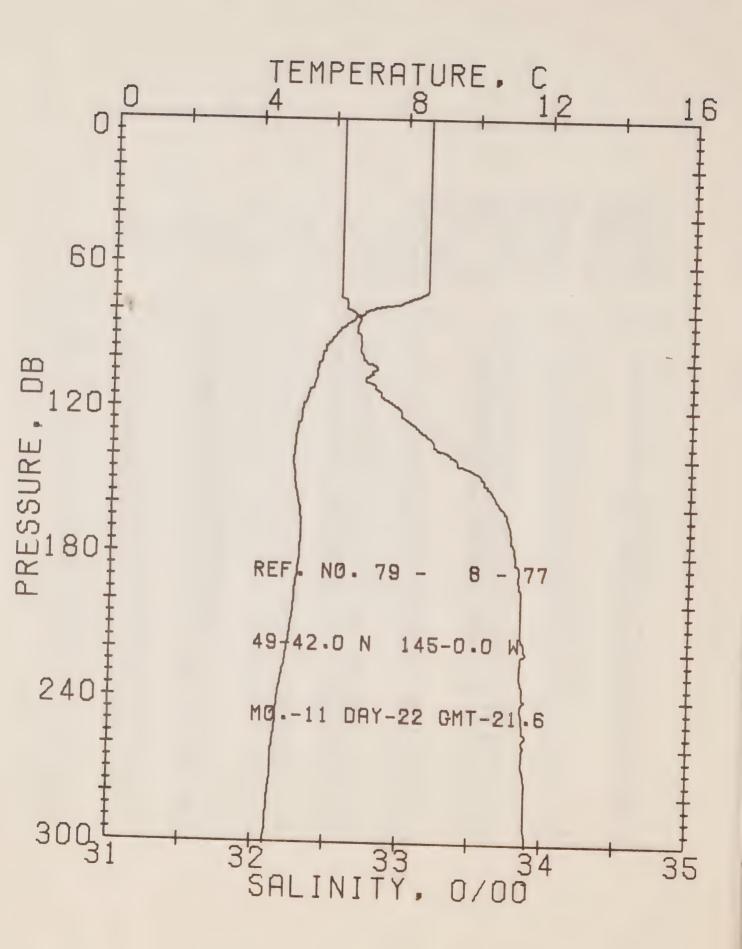
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 76 DATE 22/11/79

POSITION 49-43.0N, 144-44.0W GMT 20.1 STATION E4

RESULTS OF STP CAST 161 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT# EN	SOUND
. 0	8.62	32.54	0	25.28	270.4	•00	.00	1482.
10	8.62	32.54	10	25.28	270.6	•27	.01	1482.
20	8.62	32.54	20	25.28	270.7	•54	•06	1482.
30	8.62	32.54	30	25.28	270.9	•81	.12	1483.
40	8.62	32.54	40	25.28	271.1	1.08	.22	1483.
50	8.62	32.54	50	25.28	271.2	1.35	• 35	1483.
60	8.62	32.54	60	25.28	271.4	1.63	•50	1483.
70	8.62	32.54	70	25.28	271.5	1.90	•68	1483.
08	7.34	32.60	80	25.51	249.4	2.16	.88	1479.
90	6.16	32.68	89	25.73	228.7	2.40	1.08	1474.
100	5,80	32.69	99	25.78	223.8	2.62	1.30	1473.
110	5.49	32.81	109	25.91	211.3	2.84	1.54	1472.
120	5.22	33.06	119	26.14	189.7	3.04	1.77	1471.
130	5.06	33.22	129	26.28	176.0	3.23	2.01	1471.
140	5.00	33.41	139	20.44	161.3	3.39	2.24	1471.
150	5.06	33.53	149	26.53	153.1	3.55	2.47	1472.
160	5.14	33.63	159	26.60	146.6	3.70	2.70	1472.
170	5.19	33.72	169	26.67	140.2	3.84	2.94	1473.
180	5.19	33.78	179	26.71	136.2	3.98	3.19	1473.
190	5.14	33.80	189	26.73	134.2	4.12	3.44	1473.
200	5.07	33.84	199	26.77	131.0	4.25	3.71	1473.
210	4.99	33.83	209	. 20.77	130.8	4.38	3.98	1473.
220	4.91	33.85	218	26.80	128.2	4.51	4.27	1473.
230	4.83	33.84	228	26.80	128.2	4.64	4.56	1473.
240	4.78	33.84	238	26.80	127.7	4.77	4.87	1472.
250	4.69	33.84	248	26.81	126.8	4.89	5.19	1472.
260	4.65	33.84	258	26.82	126.4	5.02	5.51	1472.
270	4.55	33.85	268	26.84	124.7	5.15	5.85	1472.
280	4.47	33.86	278	26.85	123.2	5.27	6.20	1472.
290	4.40	33.87	288	26.87	121.8	5.39	6.56	1472.
300	4.34	33.87	298	26.88	121.2	5.51	6.92	1472.



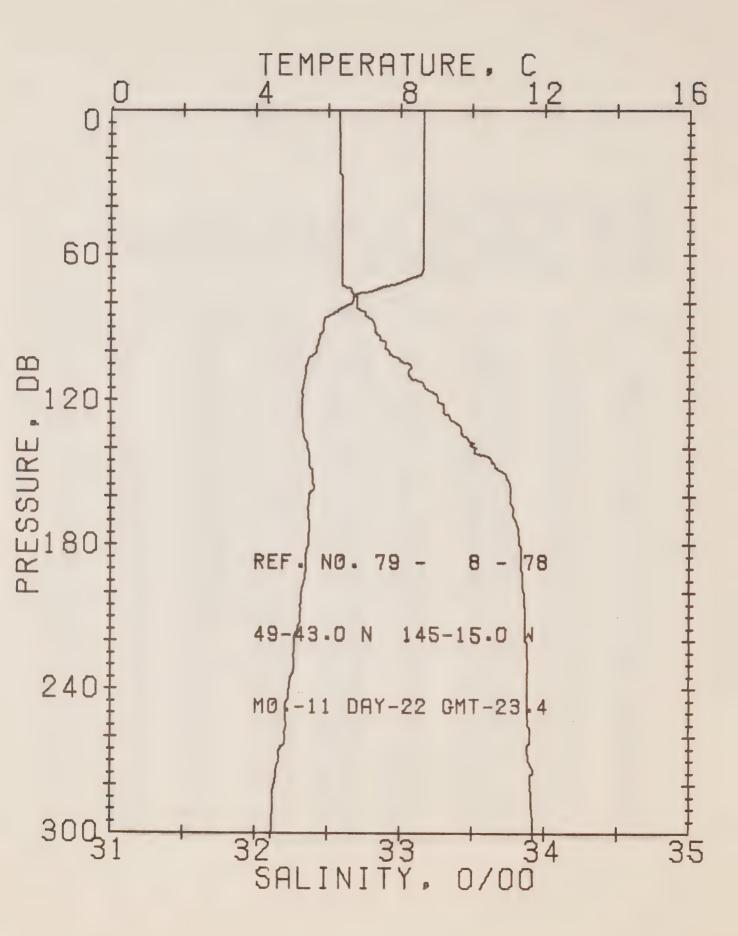
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 77

POSITION 49-42.0N, 145- .0W GMT 21.6 STATION C1

RESULTS OF STP CAST 174 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	8.63	32.56	0	25.29	269.1	•00	.00	1482.
10	8.63	32.56	10	25.29	269.2	.27	.01	1482.
20	8.64	32.56	20	25.29	269.6	•54	• 05	1483.
30	8.64	32.56	30	25.29	269.7	.81	•12	1483.
40	8.65	32.56	40	25.29	270.0	1.08	.22	1483.
50	8.65	32.56	50	25.29	270.2	1.35	• 34	1483.
60	8.65	32.56	60	25.29	270.3	1.62	•50	1483.
70	8.65	32.56	70	25.29	270.5	1.89	.67	1483.
80	6.92	32.64	80	25.60	241.0	2.15	.87	1477.
90	6.07	32.69	89	25.74	226.8	2.38	1.07	1474.
100	5.72	32.72	99	25.81	220.6	2.61	1.29	1473.
110	5.52	32.79	109	25.89	213.2	2.82	1.52	1472.
120	5.22	32.97	119	26.07	196.4	3.03	1.76	1471.
130	5.06	33.13	129	26.21	182.8	3.22	2.01	1471.
140	4.99	33.34	139	26.39	166.4	3.39	2.25	1471.
150	5.05	33.57	149	26.56	150.0	3.55	2.48	1472.
160	5.16	33.68	159	26.63	143.1	3.70	2.71	1473.
170	5.22	33.76	169	26.69	137.9	3.84	2.95	1473.
180	5.19	33.79	179	26.72	135.2	3.97	3.19	1473.
190	5.13	33.82	189	26.75	132.6	4.11	3.44	1473.
200	5.06	33.84	199	26.77	130.4	4.24	3.70	1473.
210	4.97	33.84	209	26.78	129.5	4.37	3.97	1473.
220	4.87	33.87	218	26.82	126.2	4.50	4.25	1473.
230	4.77	33.84	228	26.81	127.5	4.62	4.55	1472.
240	4.65	33.86	238	26.83	124.8	4.75	4.85	1472.
250	4.60	33.86	248	26.84	124.0	4.87	5.16	1472.
260	4.53	33.88	258	26.86	122.1	5.00	5.48	1472.
270	4.52	33.87	268	26.86	122.6	5.12	5.81	1472.
280	4.44	33.89	278	26.88	120.7	5.24	6.15	1472.
290	4.41	33.89	288	26.88	120.4	5.36	6.50	1472.
300	4.34	33.90	298	26.90	119.0	5.48	6.86	1472.



OFFSHORE OCEANOGRAPHY GROUP

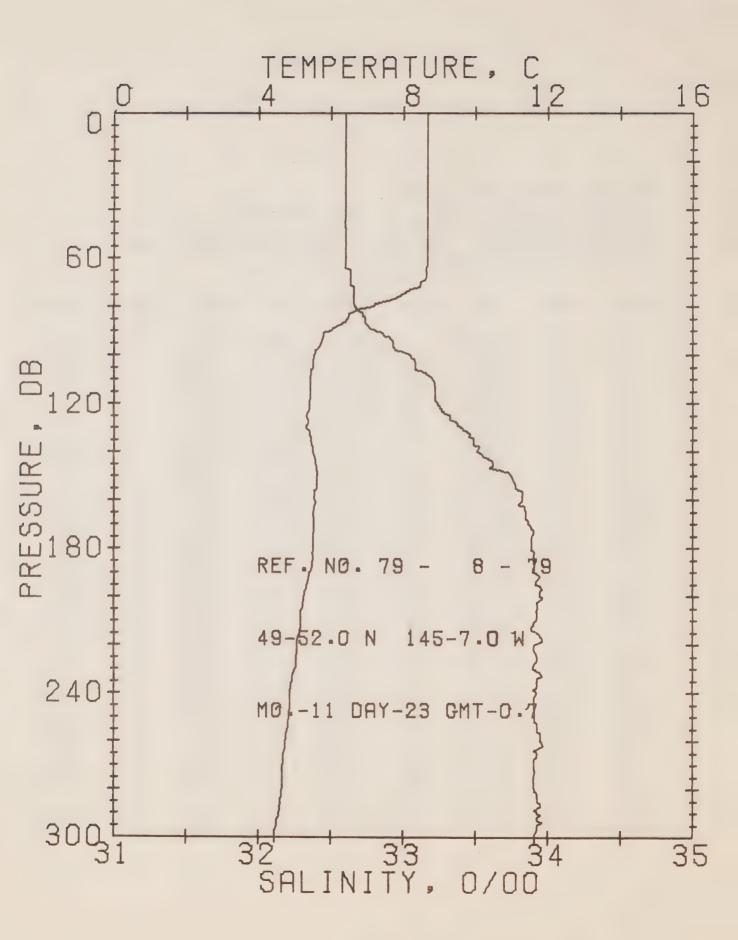
REFERENCE NO. 79- 8- 78 DATE 22/11/79

POSITION 49-43.0N, 145-15.0W GMT 23.4 STATION W4

RESULTS OF STP CAST 187 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	8.63	32.57	0	25.30	268.3	•00	•00	1482.
10	8.63	32.58	10	25.31	267.7	.27	.01	1482.
20	8.63	32.58	20	25.31	267.9	•54	.05	1483.
30	8.64	32.59	30	25.31	267.5	•80	.12	1483.
40	8.65	32.59	40	25.31	267.7	1.07	.22	1483.
50	8.65	32.59	50	25.31	268.0	1.34	. 34	1483.
60	8.65	32.59	60	25.31	268.1	1.61	•49	1483.
70	8.21	32.59	70	25.38	262.0	1.87	.67	1482.
80	6.66	32.70	80	25.68	233.2	2.12	.86	1476.
90	5.87	32.82	89	25.88	214.4	2.34	1.05	1473.
100	5.67	32.92	99	25.97	205.1	2.55	1.25	1473.
110	5.36	33.06	109	20.12	191.2	2.75	1.46	1472.
120	5.28	33.26	119	26.29	175.4	2.93	1.67	1472.
130	5.31	33.40	129	26.40	165.4	3.10	1.89	1472.
140	5.45	33.53	139	26.48	157.4	3.26	2.11	1473.
150	5,57	33.71	149	26.61	145.4	3.41	2.34	1474.
160	5.48	33.77	159	26.67	140.0	3.56	2.56	1474.
170	5.48	33.80	169	26.69	137.9	3.69	2.80	1474.
180	5.46	33.83	179	26.72	135.5	3.83	3.04	1474.
190	5.40	33.84	189	26.73	134.2	3.97	3.29	1474.
200	5.26	33.86	199	26.76	131.5	4.10	3.56	1474.
210	5.22	33.87	209	26.78	130.1	4.23	3.83	1474.
220	5.06	33.87	218	26.80	128.4	4.36	4.11	1473.
230	5.07	33.89	228	26.81	127.1	4.49	4.41	1474.
240	4.93	33.88	238	26.82	126.3	4.61	4.71	1473.
250	4.82	33.88	248	26.83	125.2	4.74	5.02	1473.
260	4.82	33.90	258	26.85	123.8	4.86	5.35	1473.
270	4.64	33.89	268	26.86	122.7	4.99	5.68	1472.
280	4.52	33.90	278	26.88	120.7	5.11	6.02	1472.
290	4.48	33.91	288	26.89	119.5	5.23	6.37	1472.
300	4.44	33.92	298	26.91	118.5	5.35	6.73	1472.



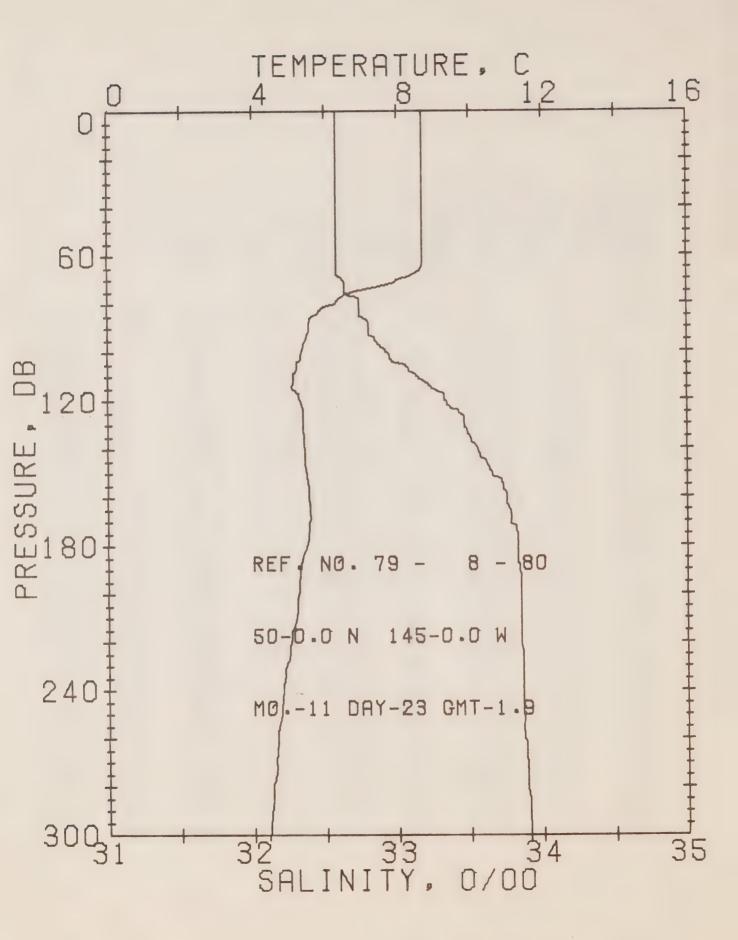
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 79 DATE 23/11/79

POSITION 49-52.0N, 145- 07.0W GMT .7 STATION W3

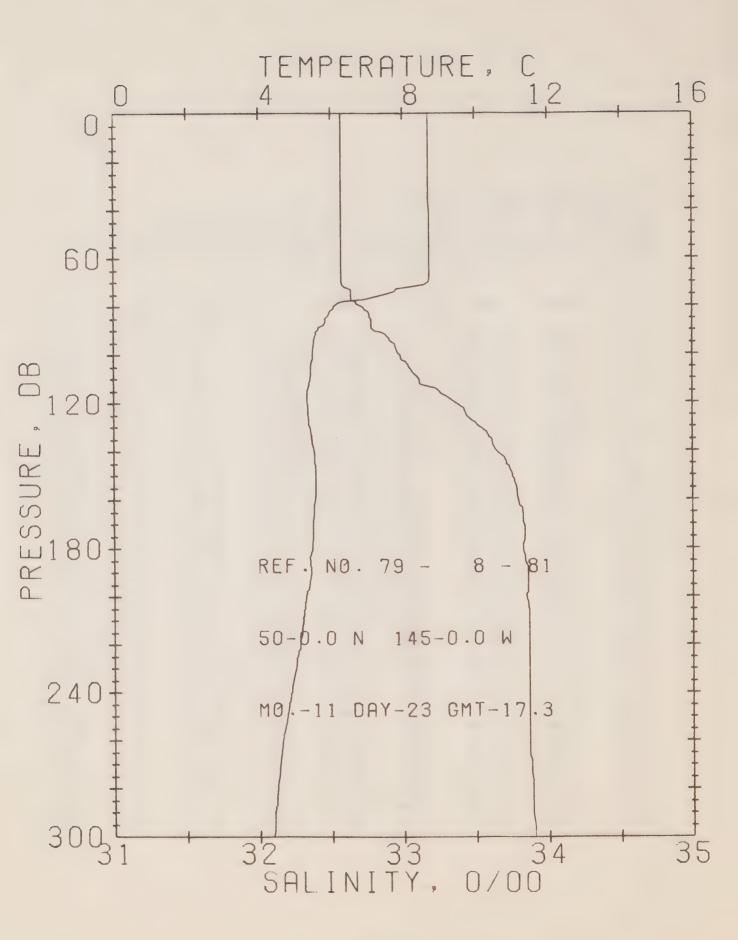
RESULTS OF STP CAST 218 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	8.66	32.60	0	25.32	266.5	•00	.00	1482.
10	8.67	32.60	10	25.32	266.8	•27	.01	1483.
20	8.66	32.60	20	25.32	266.9	•53	.05	1483.
30	8.67	32.60	30	25.31	267.2	•80	.12	1483.
40	8.67	32.60	40	25.32	267.3	1.07	.22	1483.
50	8.67	32.60	50	25.32	267.5	1.34	.34	1483.
60	8.68	32.60	60	25.31	267.8	1.60	.49	1483.
70	8.48	32.63	70	25.37	262.8	1.87	.67	1483.
80	7:14	32.66	80	25.58	242.3	2.12	.86	1478.
90	5.98	32.81	89	25.85	216.8	2.35	1.06	1474.
100	5.52	33.04	99	26.09	194.4	2.56	1.26	1472.
110	5.41	33.20	109	26.23	181.3	2.75	1.46	1472.
120	5.39	33.23	119	26.25	179.0	2.93	1.67	1472.
130	5.31	33.40	129	26.40	165.4	3.10	1.89	1472.
140	5.50	33.51	139	26.46	159.4	3.26	2.11	1473.
150	5.62	33.74	149	26.63	143.7	3.41	2.34	1474.
160	5.54	33.83	159	26.71	136.3	3.55	2.56	1474.
170	5.53	33.87	169	26.74	133.3	3.69	2.79	1474.
180	5.48	33.89	179	26.76	131.3	3.82	3.02	1474.
190	5.40	33.91	189	26.79	129.0	3.95	3.27	1474.
200	5.23	33.95	199	26.84	124.1	4.08	3.52	1474.
210	5.14	33.92	209	26.83	125.5	4.20	3.78	1474.
220	5.05	33.91	218	26.83	125.3	4.32	4.05	1473.
230	4.99	33.90	228	26.83	125.5	4.45	4.34	1473.
240	4.86	33.92	238	26.86	122.6	4.57	4.63	1473.
250	4.83	33.91	248	26.85	123.1	4.70	4.94	1473.
260	4.73	33.95	258	26.90	119.1	4.82	5.25	1473.
270	4.65	33.90	268	26.87	122.1	4.94	5.58	1473.
280	4.63	33.90	278	26.87	121.6	5.06	5.92	1473.
290	4.54	33.93	288	26.90	118.8	5.18	6.27	1472.
300	4.43	33.91	298	26.90	119.2	5.30	6.62	1472.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 80 DATE 23/11/79
POSITION 50- .0N, 145- .0W GMT 1.9 STATION P
RESULTS OF STP CAST 173 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT.	SOUND
. 0	8.70	32.58	0	25.29	268.6	•00	.00	1482.
10	8.72	32.58	10	25.29	269.0	•27	.01	1483.
20	8.71	32.58	20	25.29	269.1	•54	.05	1483.
30	8.71	32.58	30	25.29	269.2	•81	•12	1483.
40	8.71	32.58	40	25.29	269.4	1.08	•22	1483.
50	8.72	32.58	50	25.29	269.7	1.35	•34	1483.
60	8.71	32.58	60	25.29	269.7	1.62	.49	1483.
70	8.00	32.62	70	25.43	256.8	1.88	•67	1481.
80	6.26	32.73	80	25.75	226.0	2.12	•85	1474.
90	5.54	32.80	89	25.90	212.5	2.34	1.04	1472.
100	5.34	32.92	99	26.01	201.3	2.55	1.24	1471.
110	5.13	33.13	109	26.20	183.4	2.74	1.45	1471.
120	5.31	33.33	119	26.34	170.5	2.92	1.66	1472.
130	5.38	33.46	129	26.44	161.3	3.08	1.87	1473.
140	5.43	33.55	139	26.50	155.7	3.24	2.08	1473.
150	5.48	33.65	149	26.57	148.9	3.39	2.31	1474.
160	5,55	33.75	159	26.64	142.3	3.54	2.54	1474.
170	5,55	33.79	169	26.68	139.5	3.68	2.77	1474.
180	5.47	33.83	179	26.72	135.7	3.82	3.02	1474.
190	5.29	33.84	189	26.75	132.9	3.95	3.27	1474.
200	5.23	33.85	199	26.76	131.6	4.08	3.53	1474.
210	5.16	33.85	209	26.77	130.9	4.21	3.81	1474.
220	5.01	33.85	218	26.79	129.3	4.34	4.09	1473.
230	4.89	33.86	228		. 127.3	4.47	4.39	1473.
240	4.80	33.86	238	26.82	126.4	4.60	4.69	1473.
250	4.73	33.86	248	26.83	125.5	4.72	5.01	1472.
260	4.65	33.87	258	26.84	124.2	4.85	5.33	1472.
270	4.59	33.89	268	26.86	122.1	4.97	5.66	1472.
280	4.52	33.89	278	26.87	121.5	5.09	6.01	1472.
290	4.46	33.90	288	26.89	120.2	5.21	6.36	1472.
300	4.42	33.91	298	26.90	119.1	5.33	6.72	1472.



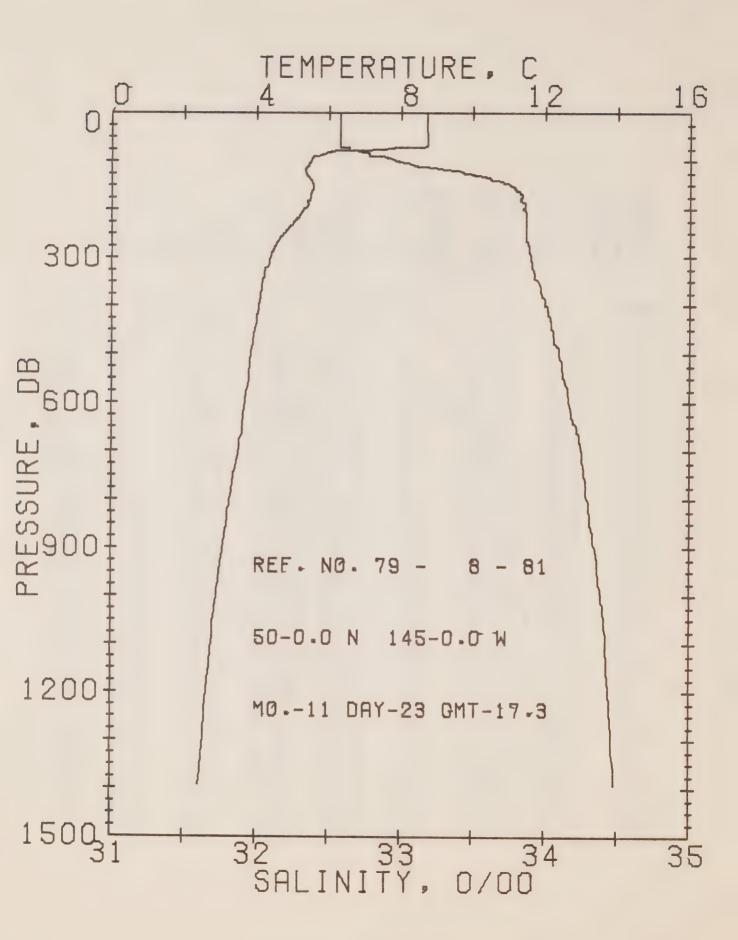
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 81 DATE 23/11/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

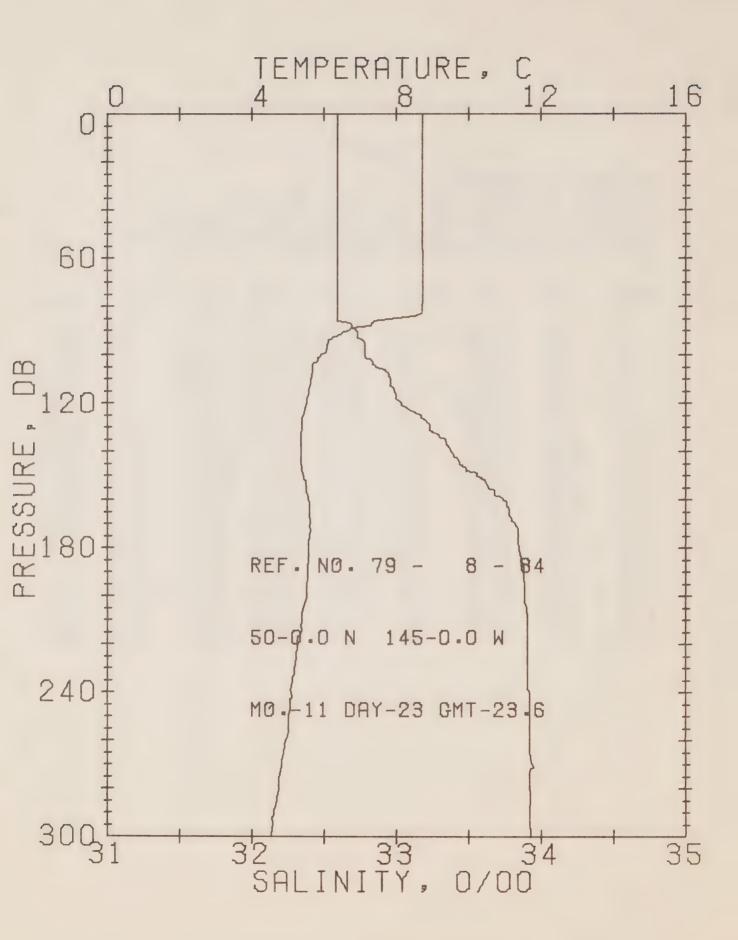
RESULTS OF STP CAST 168 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	8.73	32.57	0	25.28	269.8	• 0 0	• 00	1483.
10	8.73	32.57	10	25.28	269.9	.27	.01	1483.
20	8.73	32.57	20	25.28	270.1	•54	.06	1483.
30	8.73	32.57	30	25.28	270.3	•81	.12	1483.
40	8.74	32.57	40	25.28	270.6	1.08	.22	1483.
50	8.74	32.57	50	25.28	270.7	1.35	• 34	1483.
60	8.74	32.57	60	25.28	270.9	1.62	•50	1484.
70	8.73	32.57	70	25.28	270.9	1.89	•68	1484.
80	6.09	32.72	80	25.77	224.7	2.14	.86	1474.
90	5.62	32.80	89	25.89	213.4	2.36	1.05	1472.
100	5.49	32.98	99	26.04	198.5	2.56	1.25	1472.
110	5.42	33.11	109	26.15	188.1	2.76	1.46	1472.
120	5.34	33.37	119	26.37	167.9	2.93	1.67	1472.
130	5.41	33.53	129	26.49	156.8	3.10	1.87	1473.
140	5.53	33.64	139	26.56	149.7	3.25	2.08	1474.
150	5.58	33.75	149	26.64	142.6	3.39	2.30	1474.
160	5.55	33.80	159	26.68	138.9	3.53	2.52	1474.
170	5.49	33.84	169	26.72	135.4	3.67	2.75	1474.
180	5.46	33.83	179	26.72	135.5	3.81	2.99	1474.
190	5.44	33.86	189	26.74	133.2	3.94	3.24	1474.
200	5.29	33.85	199	26.75	132.3	4.07	3.51	1474.
210	5.20	33.87	209	26.78	129.9	4.20	3.78	1474.
220	5.12	33.87	218	26.79	129.1	4.33	4.06	1474.
230	5.00	33.87	228	26.80	127.8	4.46	4.36	1473.
240	4.88	33.87	238	26.82	126.6	4.59	4.66	1473.
250	4.75	33.87	248	26.83	125.2	4.71	4.98	1473.
260	4.62	33.87	258	26.85	123.9	4.84	5.30	1472.
270	4.55	33.88	268	26.86	122.5	4.96	5.63	1472.
280	4.49	33.89	278	26.88	121.1	5.08	5.97	1472.
290	4.41	33.89	288	26.88	120.4	5.20	6.33	1472.
300	4.36	33.90	. 298	26.90	119.2	5.32	6.69	1472.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 81 DATE 23/11/79
POSITION 50- .0N, 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 304 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	0 77	70 57	0	T 20	0400	D	EN	44.07
0	8.73	32.57	0	25.28	269.8	• 0 0	• 00	1483.
10	8.73	32.57	10	25.28	269.9	.27	.01	1483.
20	8.73	32.57	20	25.28	270.1	•54	• 06	1483.
30	8.73	32.57	30	25.28	270.3	•81	.12	1483.
50	8.74	32.57	50	25.28	270.7	1.35	.34	1483.
75	7.47	32.64	75	25.52	248.1	2.02	•77	1479.
100	5.49	32.98	99	26.04	198.5	2.56	1.25	1472.
125	5.37	33.44	124	26.42	163.0	3.02	1.77	1472.
150	5.58	33.75	149	26.64	142.6	3.39	2.30	1474.
175	5.48	33.84	174	26.72	135.0	3.74	2.87	1474.
200	5.29	33.85	199	26.75	132.3	4.07	3.51	1474.
225	5.04	33.87	223	26.80	128.2	4.40	4.21	1473.
250	4.75	33.87	248	26.83	125.2	4.71	4.98	1473.
300	4.36	33.90	298	26.90	119.2	5.32	6.69	1472.
400	4.05	34.00	397	27.01	109.0	6.47	10.75	1472.
500	3.84	34.09	496	27.10	101.1	7.52	15.56	1473.
600	3.67	34.16	595	27.18	94.7	8.49	21.04	1474.
800	3'-26	34.29	793	27.32	82.1	10.25	33.53	1476.
1000	2.90	34.39	990	27.43	72.4	11.80	47.67	1478.
1200	2.64	34.44	1188	27.49	66.8	13.18	63.19	1480.



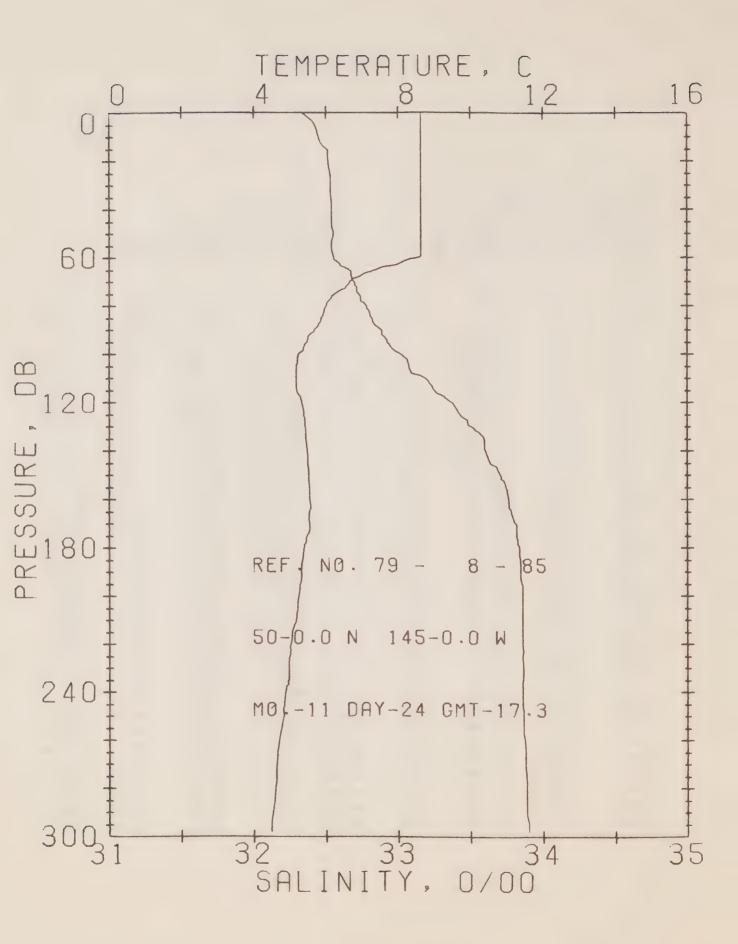
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 84 DATE 23/11/79

POSITION 50- .ON. 145- .OW GMT 23.6 STATION P

RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
			_	T		D	EN	
0	8.72	32.59	0	25.30	268.1	• 0 0	• 00	1483.
10	8.72	32.59	10	25.30	268.3	•27	.01	1483.
20	8.72	32.59	20	25.30	268.5	•54	.05	1483.
30	8.72	32.59	30	25.30	268.7	•81	•12	1483.
40	8.73	32.59	40	25.30	269.0	1.07	.22	1483.
50	8.73	32.59	50	25.30	269.1	1.34	• 34	1483.
60	8.74	32.59	60	25.30	269.4	1.61	.49	1484.
70	8.74	32.59	70	25.30	269.6	1.88	•67	1484.
80	8.73	32.59	80	25.30	269.6	2.15	•88	1484.
90	6.66	32.72	89	25.69	231.8	2.41	1.10	1476.
100	5.93	32.78	99	25.83	218.6	2.63	1.32	1473.
110	5.64	32.96	109	26.01	201.8	2.84	1.54	1473.
120	5.51	33.03	119	26.08	195.2	3.04	1.77	1472.
130	5.39	33.23	129	26.25	179.0	3.22	2.01	1472.
140	5.37	33.38	139	26.37	167.7	3.40	2.25	1473.
150	5.43	33.56	149	26.51	155.0	3.56	2.49	1473.
160	5.58	33.74	159	26.63	143.4	3.71	2.72	1474.
170	5.62	33.82	169	26.69	138.1	3.85	2.96	1475.
180	5.58	33.85	179	26.72	135.7	3.99	3.20	1475.
190	5.55	33.88	189	26.75	132.9	4.12	3.45	1475.
200	5.52	33.89	199	26.76	132.0	4.25	3.72	1475.
210	5.39	33.91	209	26.79	129.1	4.38	3.99	1475.
220	5.26	33.91	218	26.80	127.7	4.51	4.27	1474.
230	5.17	33.91	228	26.81	126.8	4.64	4.56	1474.
240	5.10	33.92	238	26.83	125.3	4.76	4.87	1474.
250	5.02	33.92	248	26.84	124.5	4.89	5.18	1474.
260	4.94	33.92	258	26.85	123.7	5.01	5.50	1474.
270	4.83	33.94	268	26.88	120.8	5.14	5.83	1473.
280	4.74	33.92	278	26.87	121.7	5.26	6.17	1473.
290	4.60	33.92	288	26.89	120.2	5.38	6.52	1473.
300	4.53	33.93	298	26.90	118.8	5.50	6.88	1473.



OFFSHORE OCEANOGRAPHY GROUP

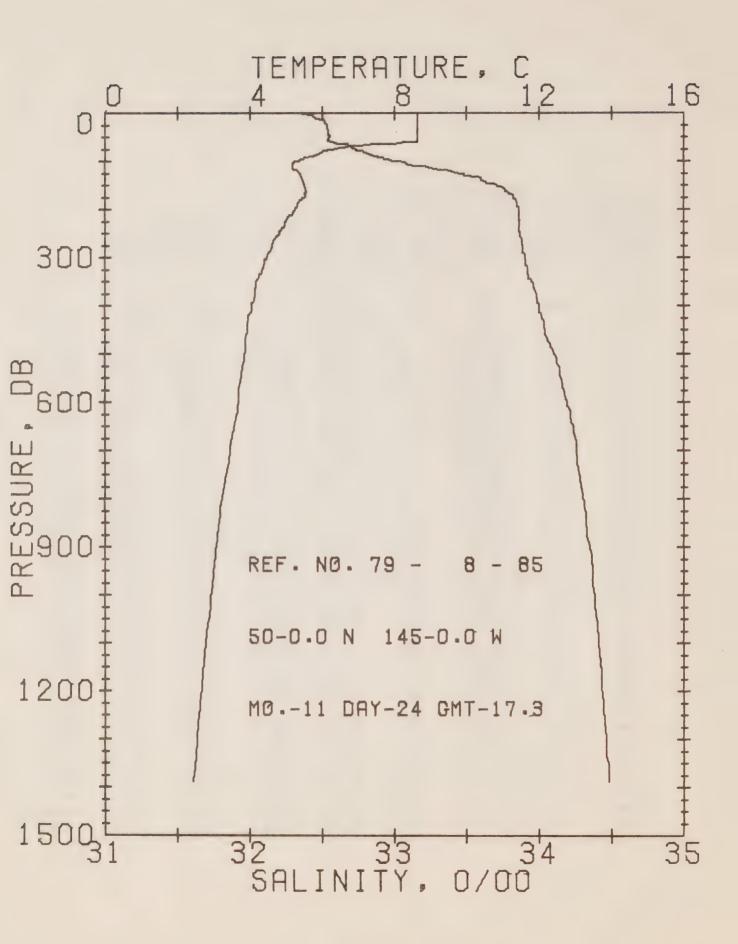
REFLRENCE NO. 79- 8- 85 DATE 24/11/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 171 POINTS TAKEN FROM ANALOG TRACE

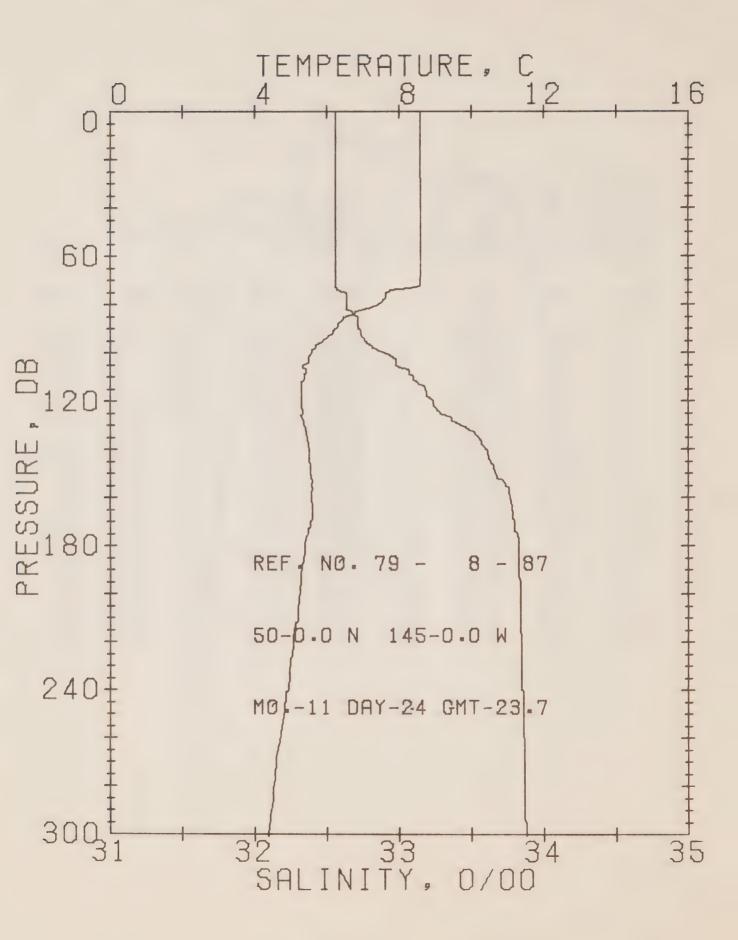
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	8.65	32.34	0	25.12	285.7	• 0 0	.00	1482.
10	8.65	32.45	10	25.20	277.7	•28	.01	1482.
20	8.65	32.51	20	25.25	273.0	• 55	.06	1482.
30	8.65	32.53	30	25.26	272.1	•83	•13	1483.
40	8.65	32.54	40	25.27	271.5	1.10	.22	1483.
50	8.65	32.55	50	25.28	270.9	1.37	• 35	1483.
60	8.61	32.55	60	25.29	270.5	1.64	•50	1483.
70	6.66	32.70	70	25.68	233.1	1.89	•66	1476.
80	6.01	32.78	80	25.82	219.3	2.12	.84	1473.
90	5.67	32.89	89	25.95	207.2	2.33	1.02	1472.
100	5.23	33.02	99	26.11	192.6	2.53	1.22	1471.
110	5.17	33.19	109	26.25	179.3	2.72	1.42	1471.
120	5.33	33.38	119	26.38	167.0	2.89	1.62	1472.
130	5.42	33.52	129	26.48	157.7	3.06	1.83	1473.
140	5,47	33.61	139	26.54	151.9	3.21	2.04	1473.
150	5.52	33.71	149	26.62	144.9	3.36	2.26	1474.
160	5.55	33.77	159	26.66	140.8	3.50	2.49	1474.
170	5.54	33.82	169	26.70	137.1	3.64	2.72	1474.
180	5.38	33.84	179	26.73	133.9	3.78	2.96	1474.
190 .	5.31	33.85	139	26.75	132.4	3.91	3.21	1474.
200	5.23	33.86	199	26.77	130.9	4.04	3.48	1474.
210	5.16	33.86	209	26.78	130.1	4.17	3.75	1474.
220	5.01	33.86	218	26.79	128.6	4.30	4.03	1473.
230	4.96	33.87	228	26.81	127.4	4.43	4.32	1473.
240	4.87	33.86	238	26.81	127.1	4.56	4.63	1473.
250	4.82	33.87	248	26.82	126.0	4.68	4.95	1473.
260	4.70	33.87	258	26.84	124.4	4.81	5.27	1473.
270	4.61	33.88	268	26.85	123.1	4.93	5.61	1472.
280	4.59	33.89	278	26.86	122.2	5.06	5.95	1472.
290	4.52	33.89	288	26.87	121.6	5.18	6.30	1472.
300	4.46	33.90	298	26.89	120.3	5.30	6.67	1472.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79-8-85 DATE 24/11/79
POSITION 50-.0N, 145-.0W GMT 17.3 STATION P
RESULTS OF STP CAST 293 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA D	POT. EN	SOUND
0	8.65	32.34	0	25.12	285.7	•00	•00	1482.
10	8.65	32.45	10	25.20	277.7	•28	.01	1482.
20	8.65	32.51	20	25.25	273.0	•55	.06	1482.
30	8.65	32.53	30	25.26	272.1	•83	.13	1483.
50	8.65	32.55	50	25.28	270.9	1.37	. 35	1483.
75	6.25	32.73	75	25.75	225.8	2.01	.75	1474.
100	5.23	33.02	99	26.11	192.6	2.53	1.22	1471.
125	5.39	33.43	124	26.41	163.6	2.98	1.73	1473.
150	5.52	33.71	149	26.62	144.9	3.36	2.26	1474.
175	5.47	33.82	174	26.71	136.4	3.71	2.84	1474.
200	5.23	33.86	199	26.77	130.9	4.04	3.48	1474.
225	4.98	33.86	223	26.80	128.3	4.37	4.18	1473.
250	4.82	33.87	248	26.82	126.0	4.68	4.95	1473.
300	4.46	33.90	298	26.89	120.3	5.30	6.67	1472.
400	4.05	34.00	397	27.01	109.3	6.44	10.74	1472.
500	3485	34.10	496	27.11	100.3	7.50	15.57	1473.
600	3.67	34.19	595	27.20	92.8	8.46	20.96	1474.
800	3.22	34.30	793	27.33	80.9	10.19	33.26	1476.
1000	2.92	34.38	990	27.42	73.4	11.72	47.31	1478.
1200	2.65	34.43	1188	27.49	67.5	13.13	63.03	1480.



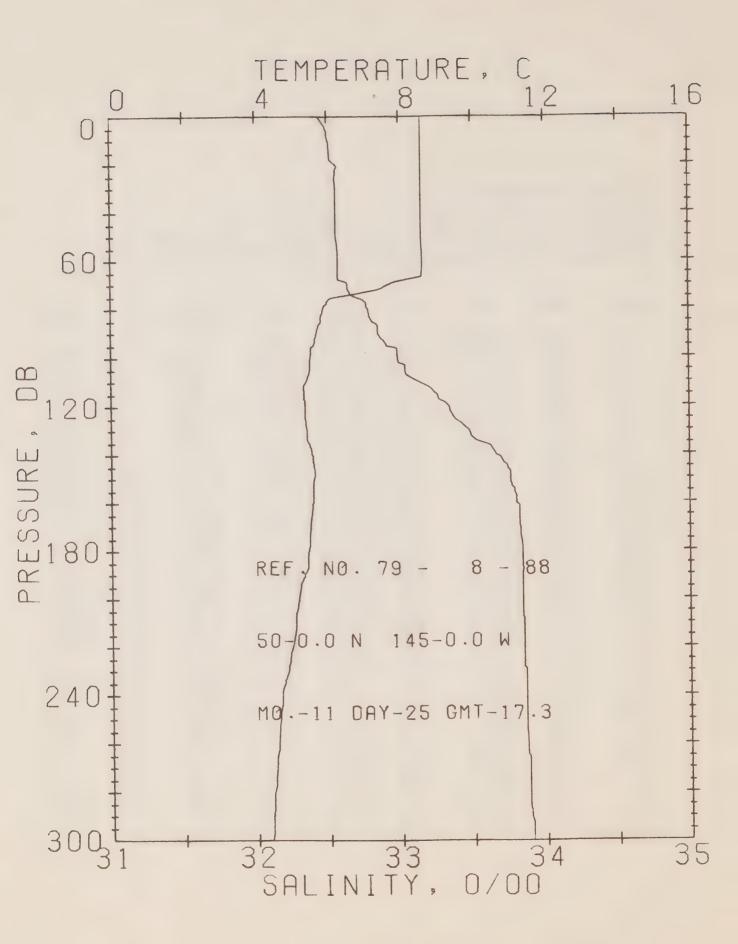
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 87 DATE 24/11/79

POSITION 50- .0N, 145- .0W GMT 23.7 STATION P

RESULTS OF STP CAST 153 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	8.59	32.56	0	25.30	268.5	•00	•00	1482.
10	8.60	32.56	10	25.29	268.8	•27	•01	1482.
20	8.60	32.56	20	25.29	269.0	•54	•05	1482.
30	8.61	32.56	30	25.29	269.2	•81	.12	1483.
40	8.61	32.56	40	25.29	269.4	1.08	.22	1483.
50	8.61	32.56	50	25.29	269.6	1.35	.34	1483.
60	8.61	32.56	60	25.29	269.8	1.62	.49	1483.
70	8.60	32.56	70	25.29	269.8	1.89	.67	1483.
80	7.45	32.64	80	25.52	247.9	2.14	.87	1479.
90	6.25	32.72	89	25.75	226.8	2.38	1.07	1475.
100	5.57	32.90	99	25.97	205.4	2.60	1.28	1472.
110	5.38	33.10	109	26.15	188.4	2.79	1.49	1472.
120	5.32	33.23	119	26.26	178.1	2.97	1.71	1472.
130	5.39	33.43	129	26.41	163.7	3.15	1.93	1473.
140	5.51	33.60	139	26.53	152.8	3.30	2.14	1474.
150	5.56	33.67	149	26.58	148.5	3.45	2.37	1474.
160	5.58	33.77	159	26.66	141.2	3.60	2.59	1474.
170	5.55	33.80	169	26.68	138.7	3.74	2.83	1474.
180	5.39	33.83	179	26.73	134.8	3.88	3.07	1474.
190	5.31	33.83	189	26.74	133.9	4.01	3.33	1474.
200	5.23	33.84	199	26.75	132.4	4.14	3.59	1474.
210	5.19	33.84	209	26.76	132.0	4.28	3.87	1474.
220	5.07	33.85	218	26.78	130.0	4.41	4.15	1473.
230	4.97	33.85	228	26.79	129.0	4.54	4.45	1473.
240	4.93	33.85	238	26.80	128.6	4.66	4.76	1473.
250	4.81	33.86	248	26.82	126.6	4.79	5.08	1473.
260	4.71	33.86	258	26.83	125.2	4.92	5.40	1473.
270	4.59	33.87	268	26.85	123.6	5.04	5.74	1472.
280	4.52	33.87	278	26.86	123.0	5.16	6.09	1472.
290	4.46	33.87	288	26.86	122.4	5.29	6.44	1472.
300	4.38	33.88	298	26.88	120.9	5.41	6.81	1472.



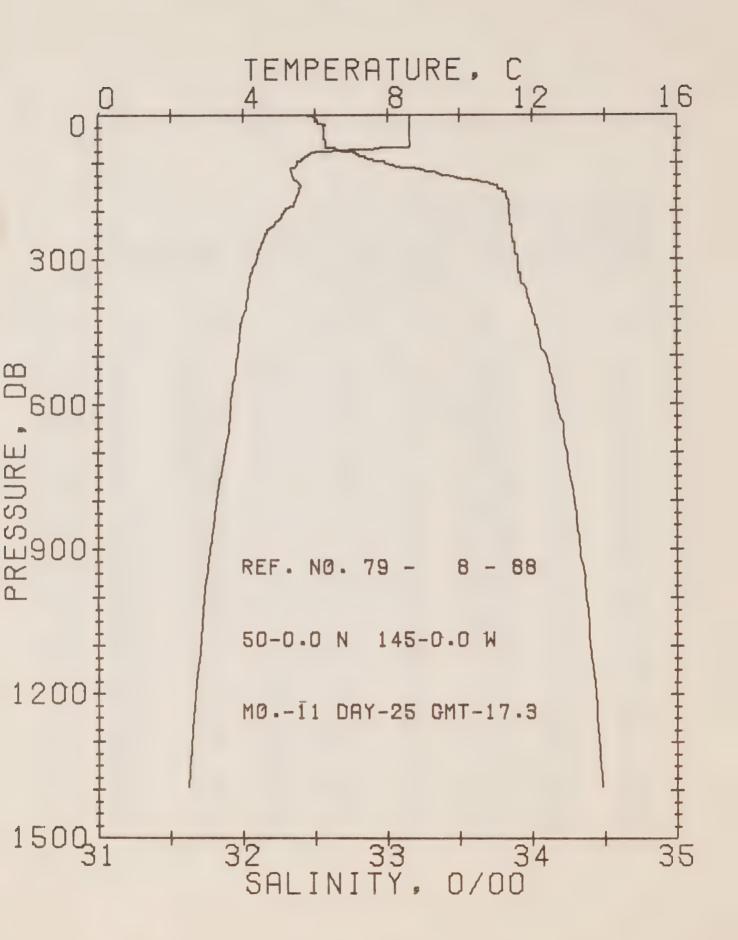
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 88 DATE 25/11/79

POSITION 50- .ON, 145- .OW GMT 17.3 STATION P

RESULTS OF STP CAST 171 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	8.61	32.44	0	25.20	277.7	•00	•00	1482.
10	8.62	32.51	10	25.25	273.0	.27	.01	1482.
20	8.62	32.56	20	25.29	269.3	• 55	• 06	1482.
30	8.62	32.56	30	25.29	269.4	•82	.12	1483.
40	8.62	32.56	40	25.29	269.6	1.09	.22	1483.
50	8.62	32.56	50	25.29	269.7	1.36	• 34	1483.
60	8.63	32.57	60	25.30	269.3	1.62	•50	1483.
70	7.67	32.64	70	25.49	250.7	1.89	•67	1480.
80	5.87	32.78	80	25.84	217.6	2.12	.85	1473.
90	5.68	32.85	89	25.92	210.3	2.34	1.03	1472.
100	5.51	32.98	99	26.04	198.4	2.54	1.23	1472.
110	5.38	33.13	109	26.17	136.2	2.73	1.44	1472.
120	5.35	33.34	119	26.34	170.2	2.91	1.65	1472.
130	5.41	33.48	129	26.45	160.5	3.08	1.86	1473.
140	5.55	33.66	139	26.57	148.8	3.23	2.07	1474.
150	5.60	33.76	149	20.65	142.1	3.38	2.28	1474.
160	5.56	33.80	159	26.68	138.7	3.52	2.50	1474.
170	5.50	33.83	169	26.71	135.9	3.65	2.73	1474.
180	5.44	33.84	1.79	26.73	134.6	3.79	2.98	1474.
190	5.32	33.84	189	26.74	133.3	3.92	3.23	1474.
200	5.14	33.84	199	26.76	131.3	4.06	3.49	1473.
210	5.07	33.85	209	26.78	129.9	4.19	3.76	1473.
220	4.96	33.85	218	26.79	128.8	4.32	4.05	1473.
230	4.85	33.86	228	26.81	126.9	4.44	4.34	1473.
240	4.67	33.86	238	26.83	125.0	4.57	4.64	1472.
250	4.60	33.86	248	26.84	124.3	4.69	4.95	1472.
260	4.57	33.87	258	26.85	123.3	4.82	5.28	1472.
270	4.50	33.88	268	20.87	121.9	4.94	5.61	1472.
280	4.44	33.88	278	26.87	121.4	5.06	5.95	1472.
290	4.40	33.89	288	26.89	120.3	5.18	6.30	1472.
300	4.38	53.90	298	26.90	119.4	5.30	6.66	1472.



OFFSHORE OCEANOGRAPHY GROUP

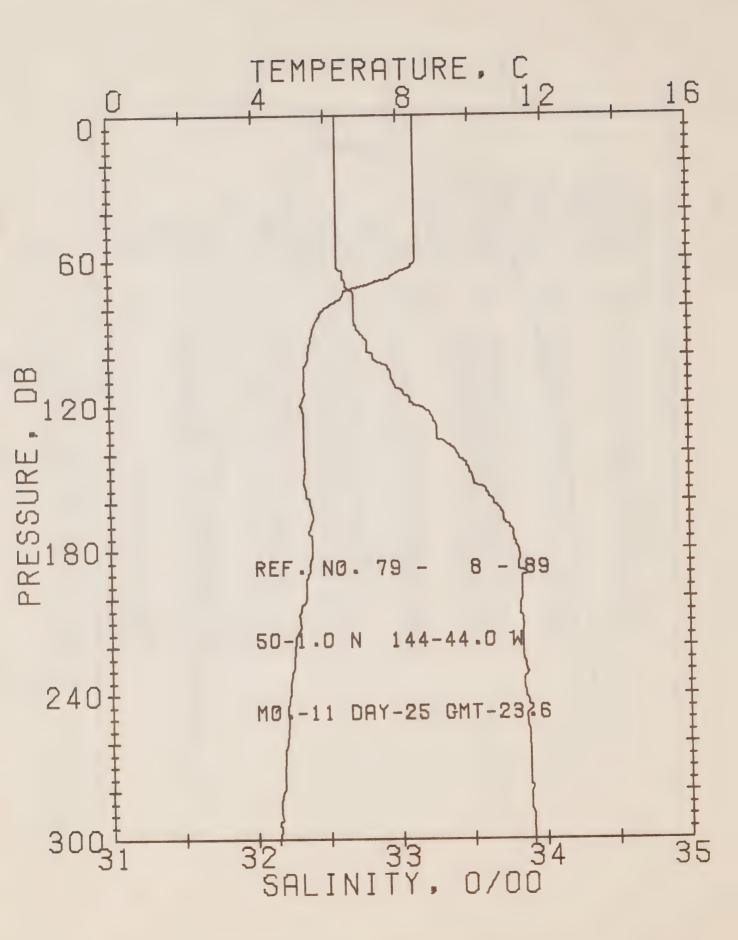
REFERENCE NO. 79- 8- 88 DATE 25/11/79

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 279 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	8.61	32.44	0	25.20	277.7	•00	•00	1482.
10	8.62	32.51	10	25.25	273.0	.27	.01	1482.
20	8.62	32.56	20	25.29	269.3	• 55	•06	1482.
30	8.62	32.56	30	25.29	269.4	•82	.12	1483.
50	8.62	32.56	50	25.29	269.7	1.36	• 34	1483.
75	6.19	32.70	75	25.74	227.4	2.01	.76	1474.
100	5.51	32.98	99	26.04	198.4	2.54	1.23	1472.
125	5.37	33.38	124	26.37	167.5	3.00	1.75	1472.
150	5.60	33.76	149	26.65	142.1	3.38	2.28	1474.
175	5.47	53.83	174	26.72	135.3	3.72	2.85	1474.
200	5.14	33.84	199	26.76	131.3	4.06	3.49	1473.
225	4.89	33.85	223	26.80	128.0	4.38	4.19	1473.
250	4.60	33.86	248	26.84	124.3	4.69	4.95	1472.
300	4.38	33.90	298	26.90	119.4	5.30	6.66	1472.
400	4.07	33.99	397	27.00	110.0	6.45	10.75	1472.
500	3.83	34.09	496	27.10	101.1	7.51	15.59	1473.
600	3.66	34.17	595	27.18	94.3	8.48	21.03	1474.
800	3.26	34.29	793	27.32	82.4	10.25	33.59	1476.
1000	2.91	34.37	990	27.41	73.9	11.80	47.87	1478.
1200	2.68	34.43	1188	27.49	67.7	13.22	63.76	1480.



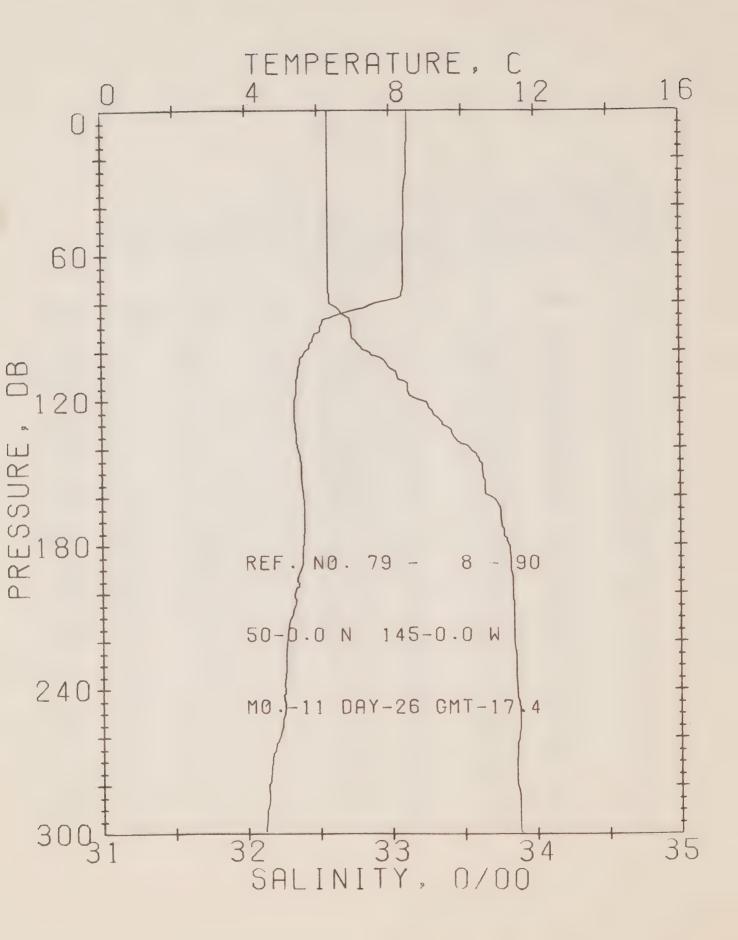
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 89 DATE 25/11/79

POSITION 50- 1.0N, 144-44,0W GMT 23.6 STATION P

RESULTS OF STP CAST 198 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	8'.48	32.58	0	25.33	265.4	•00	.00	1482.
10	8.48	32.58	10	25.33	265.7	.27	.01	1482.
20	8.49	32.58	20	25.33	266.0	•53	• 05	1482.
30	8.50	32.58	30	25.33	266.2	•80	.12	1482.
40	8.50	32.58	40	25.33	266.4	1.06	•22	1482.
50	8.50	32.58	50	25.33	266.5	1.33	.34	1483.
60	8,50	32.58	60	25.33	266.7	1.60	.49	1483.
70	7.25	32.64	70	25.55	245.1	1.85	•66	1478.
80	5.98	32.69	80	25.76	225.7	2.09	.84	1473.
90	5,63	32.72	89	25.83	219.0	2.31	1.03	1472.
100	5.49	32.82	99	25.92	210.5	2.52	1.24	1472.
110	5.37	32.96	109	26.04	198.8	2.73	1.45	1472.
120	5,26	33.10	119	26.16	187.1	2.92	1.68	1472.
130	5.35	33.26	129	26.28	176.3	3.10	1.91	1472.
140	5.36	33.40	139	26.39	166.1	3.27	2.15	1473.
150	5.35	33.50	149	26.47	158.3	3.43	2.39	1473.
160	5.51	33.65	159	26.57	149.3	3.59	2.63	1474.
170	5.52	33.76	169	26.66	141.4	3.73	2.87	1474.
180	5.58	33.82	179	26.70	137.7	3.87	3.12	1475.
190	5.45	33.88	189	26.76	131.8	4.01	3.38	1474.
200	5.39	33.84	199	26.73	134.2	4.14	3.65	1474.
210	5.21	33.84	209	26.75	132.2	4.28	3.92	1474.
220	5.05	33.84	218	26.77	130.5	4.41	4.21	1473.
230	4.98	33.87	228	26.81	127.6	4.54	4.51	1473.
240	4.90	33.86	238	26.81	127.5	4.66	4.81	1473.
250	4.86	33.87	248	26.82	126.4	4.79	5.13	1473.
260	4.79	33.88	258	26.83	125.0	4.92	5.46	1473.
270	4.73	33.89	268	26.85	123.7	5.04	5.79	1473.
280	4.69	33.89	278	26.86	123.0	5.16	6.14	1473.
290	4.63	33.91	288	26.88	121.3	5.29	6.49	1473.
300	4.57	33.91	298	26.88	120.7	5.41	6.86	1473.



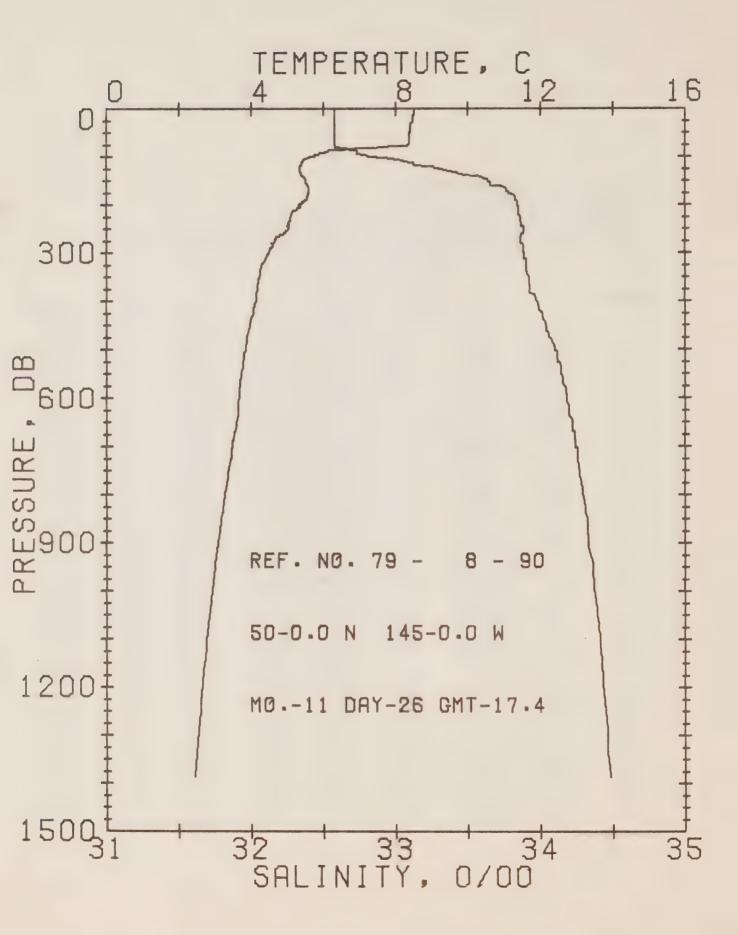
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 90 DATE 26/11/79

POSITION 50- .0N, 145- .0W GMT 17.4 STATION P

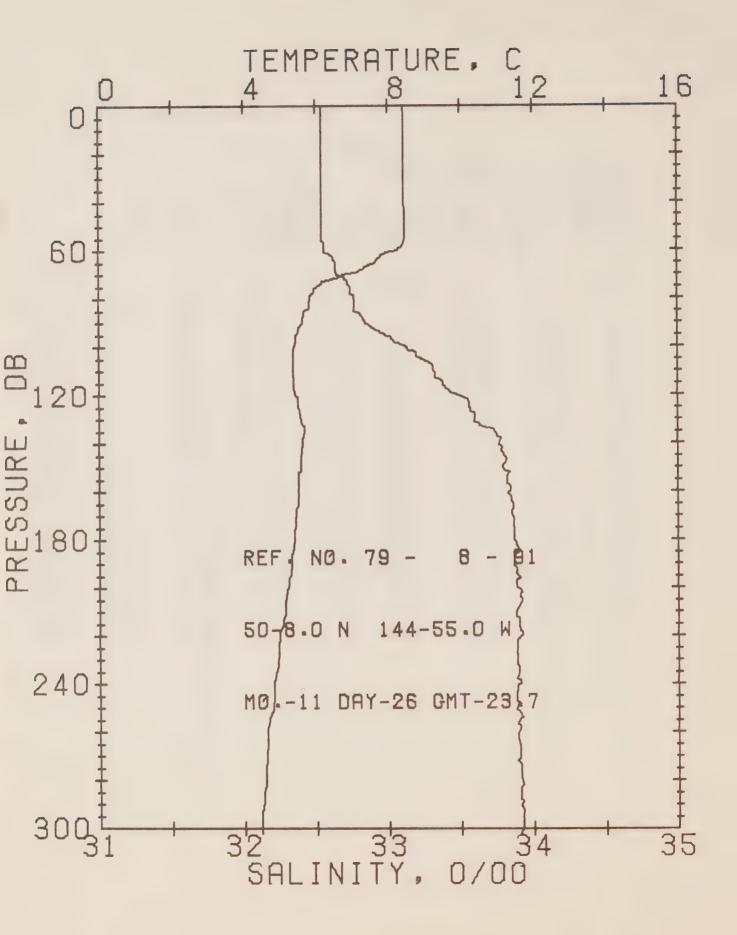
RESULTS OF STP CAST 175 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

DDCCC	TEMD	CAL	DEDTH	CYCAAA	C111	DEL TA	D.A.*	C 01 11:0
PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
()	6 50	70 E7	0	T 70	066 5	D	EN	44.00
0 10	8.50 8.50	32.57 32.57	0	25.32	266.5	• 00	•00	1482.
20	8.49		10	25.32	266.6	•27	.01	1482.
30	8.43	32.57 32.57	20 30	25.32 25.33	266.6	•53	• 05	1482.
40	8.40	32.57	40	25.33	265.9	-80	.12	1482.
50	8.38	32.57	50	25.33	265.6 265.6	1.07 1.33	•22	1482. 1482.
60	8.37	32.57	60	25.34	265.6	1.60	• 49	1482.
70	8.37	32.57	70	25.34	265.7	1.86	•66	1482.
80	7.57	32.58	80	25.46	254.0	2.13	•87	1479.
90	6.04	32.73	89	25.78	223.5	2.36	1.07	1474.
100	5.62	32.86	99	25.93	209.0	2.58	1.28	1472.
110	5.42	33.05	109	26.10	192.9	2.78	1.49	1472.
120	5.34	33.20	119	26.23	180.6	2.97	1.71	1472.
130	5.35	33.36	129	26.36	168.8	3.14	1.93	1472.
140	5.42	33.55	139	26.50	155.5	3.30	2.16	1473.
150	5.52	33.63	149	26.56	150.5	3.45	2.38	1474.
160	5.58	33.70	159	26.60	146.4	3.60	2.62	1474.
170	5.60	33.76	169	26.65	142.0	3.75	2.86	1475.
180	5.57	33.82	179	26.70	137.6	3.89	3.11	1475.
190	5.50	33.83	189	26.71	136.1	4.02	3.37	1475.
200	5.32	33.84	199	26.74	133.5	4.16	3.64	1474.
210	5.22	33.85	209	26.76	131.5	4.29	3.91	1474.
220	5.10	33.85	218	26.78	130.3	4.42	4.20	1473.
230	5.07	33.86	228	26.79	129.4	4.55	4.50	1474.
240	5.04	33.87	238	26.80	128.4	4.68	4.80	1474.
250	5.02	33.89	248	26.82	126.8	4.81	5.12	1474.
260	4.88	33.88	258	26.82	126.0	4.93	5.45	1473.
270	4.66	33.86	268	26.83	125.2	5.06	5.79	1472.
280	4.57	33.87	278	26.85	123.5	5.18	6.14	1472.
290	4.54	33.88	288	26.86	122.5	5.31	6.50	1472.
300	4.46	33.89	298	26.88	121.0	5.43	6.86	1472.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 90 DATE 26/11/79
POSITION 50- .0N, 145- .0W GMT 17.4 STATION P
RESULTS OF STP CAST 300 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
^	0.60	70 57	^		0	_		91.00
0	8.50	32.57	0	25.32	266.5	• 0 0	• 0 0	1482.
10	8.50	32.57	10	25.32	266.6	•27	.01	1482.
20	8.49	32.57	20	25.32	266.6	•53	• 05	1482.
30	8.43	32.57	30	25.33	265.9	•80	.12	1482.
50	8.38	32.57	50	25.33	265.6	1.33	. 34	1482.
75	8.34	32.57	75	25.34	265.4	1.99	.76	1482.
100	5.62	32.86	99	25.93	209.0	2.58	1.28	1472.
125	5'.34	33.30	124	26.31	173.5	3.05	1.82	1472.
150	5.52	33.63	149	26.56	150.5	3.45	2.38	1474.
175	5.61	33.78	174	26.66	141.0	3.82	2.98	1475.
200	5.32	33.84	199	26.74	133.5	4.16	3.64	1474.
225	5.08	33.86	223	26.79	129.4	4.49	4.35	1473.
250	5.02	33.89	248	26.82	126.8	4.81	5.12	1474.
300	4.46	33.89	298	26.88	121.0	5.43	6.86	1472.
400	4.11	33.97	397	26.98	111.8	6.60	11.03	1472.
500	3.83	34.10	496	27.11	100.4	7.66	15.88	1473.
600	3.65	34.18	595	27.19	93.1	8.62	21.28	1474.
008	3.25	34.29	793	27.32	82.0	10.37	33.73	1476.
1000	2.91	34.37	990	27.41	73.8	11.93	47.93	1478.
1200	2.62	34.43	1188	27.49	67.3	13.33	63.65	1480.



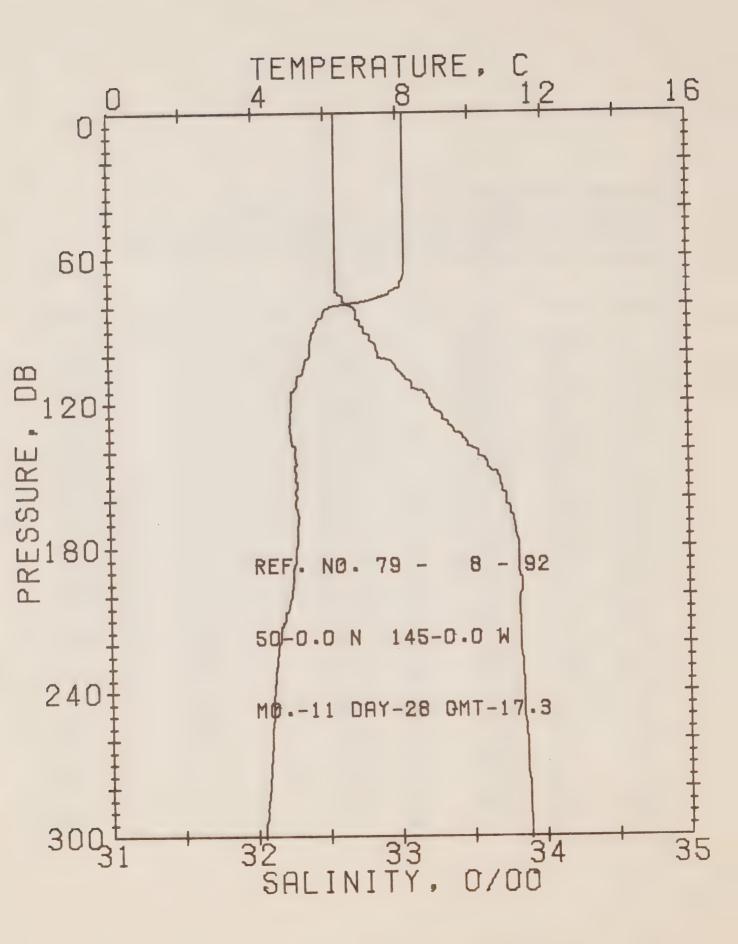
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 91 DATE 26/11/79

POSITION 50- 8.0N, 144-55.0W GMT 23.7 STATION P

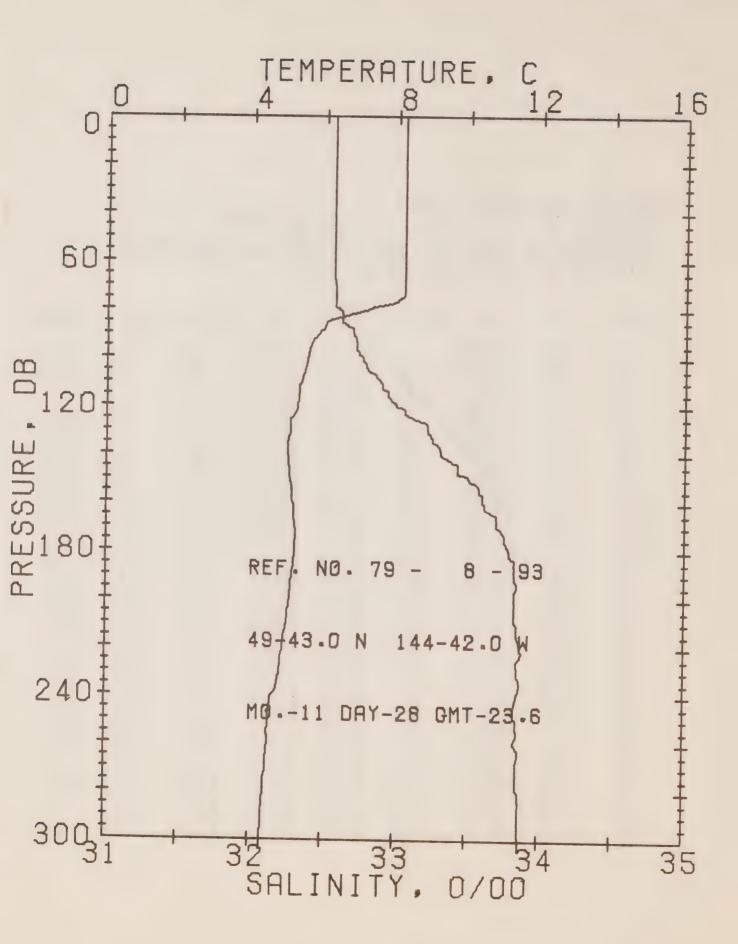
RESULTS OF STP CAST 191 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DLPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	8.43	32.54	0	25.30	267.7	•00	•00	1481.
10	8.44	32.54	10	25.30	268.1	•27	.01	1482.
20	8.45	32.54	20	25.30	268.3	•54	.05	1482.
30	8.45	32.54	30	25.30	268.5	•80	.12	1482.
40	8.46	32.54	40	25.30	268.7	1.07	•22	1482.
50	8.47	32.54	50	25.30	269.1	1.34	• 34	1482.
60	8.24	32.56	60	25.35	264.5	1.61	.49	1482.
70	6.74	32.64	70	25.62	238.6	1.86	•66	1476.
80	5.84	32.76	80	25.83	218.8	2.09	•83	1473.
90	5.63	32.84	89	25.92	210.5	2.30	1.02	1472.
100	5.38	33.12	99	26.17	186.8	2.50	1.21	1472.
110	5.36	33.32	109	26.32	172.0	2.68	1.40	1472.
120	5.45	33.48	119	26.44	160.9	2.85	1.60	1473.
130	5.59	33.60	129	26.52	153.7	3.00	1.80	1474.
140	5.63	33.77	139	26.65	141.6	3.15	2.00	1474.
150	5.57	33.79	149	26.67	139.5	3.29	2.20	1474.
160	5.49	33.84	159	26.72	134.9	3.42	2.42	1474.
170	5.43	33.86	169	26.74	133.1	3.56	2.64	1474.
180	5.38	33.87	179	26.76	131.6	3.69	2.88	1474.
190	5.31	33.87	189	26.77	131.0	3.82	3.12	1474.
200	5,21	33.89	199	26.79	128.4	3.95	3.38	1474.
210	5.11	33.88	209	26.80	128.1	4.08	3.65	1473.
220	4.96	33.92	218	26.85	123.5	4.20	3.92	1473.
230	4.92	33.89	228	26.83	125.4	4.33	4.21	1473.
240	4.80	33.91	238	26.86	122.7	4.45	4.51	1473.
250	4.77	33.89	248	26.84	124.3	4.58	4.82	1473.
260	4.61	33.89	258	26.87	121.9	4.70	5.14	1472.
270	4.58	33.90	268	26.87	121.3	4.82	5.46	1472.
280	4.56	33.91	278	26.89	120.2	4.94	5.80	1472.
290	4.49	33.91	288	26.90	119.4	5.06	6.15	1472.
300	4.45	33.92	298	26.90	118.7	5.18	6.51	1472.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79-8-92
DATE 28/11/79
POSITION 50-.0N, 145-,0W GMT 17.3 STATION P
RESULTS OF STP CAST 173 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
0	8.19	32.57	0	25.36	262.1	•00	.00	1480.
10	8.19	32.57	10	25.36	262.2	•26	.01	1481.
20	8.19	32.57	20	25.36	262.4	•52	• 05	1481.
30	8.19	32.57	30	25.36	262.5	•79	.12	1481.
40	8.20	32.57	40	25.36	262.9	1.05	•21	1481.
50	8.21	32.57	50	25.36	263.1	1.31	•33	1481.
60	8.21	32.57	60	25.36	263.3	1.58	•48	1482.
70	8.08	32.57	70	25.38	261.6	1.84	•66	1481.
80	6.11	32.68	80	25.73	228.0	2.09	•85	1474.
90	5.67	32.76	89	25.85	216.9	2.31	1.04	1472.
100	5.54	32.86	99	25.94	208.1	2.52	1.25	1472.
110	5.20	33.05	109	26.13	190.1	2.72	1.46	1471.
120	5.01	33.21	119	26.28	176.1	2.90	1.67	1471.
130	4.99	33.37	129	26.41	164.1	3.07	1.89	1471.
140	5.12	33.55	139	26.54	152.1	3.23	2.11	1472.
150	5.14	33.68	149	26.64	142.7	3.38	2.32	1472.
160	5.15	33.74	159	26.68	138.5	3.52	2.55	1473.
170	5.20	33.79	169	26.72	135.1	3.66	2.78	1473.
180	5.13	33.82	179	26.75	132.5	3.79	3.02	1473.
190	5.04	33.82	189	26.76	131.4	3.92	3.26	1473.
200	4.98	33.83	199	20.77	130.3	4.05	3.52	1473.
210	4.80	33.83	209	26.79	128.4	4.18	3.79	1472.
220	4.60	33.83	218	26.82	126.3	4.31	4.07	1471.
230	4.53	33.84	228	26.83	124.8	4.44	4.36	1471.
240	4.47	33.85	238	26.85	123.5	4.56	4.66	1471.
250	4.45	33.85	248	26.85	123.4	4.68	4.97	1471.
260	4.40	33.87	258	26.87	121.7	4.81	5.28	1471.
270	4.35	33.87	268	26.87	121.0	4.93	5.61	1471.
280	4.31	33.88	278	26.89	120.0	5.05	5.95	1471.
290	4.26	33.88	288	26.89	119.5	5.17	6.30	1471.
300	4.19	33.89	298	26.91	118.1	5.29	6.65	1471.



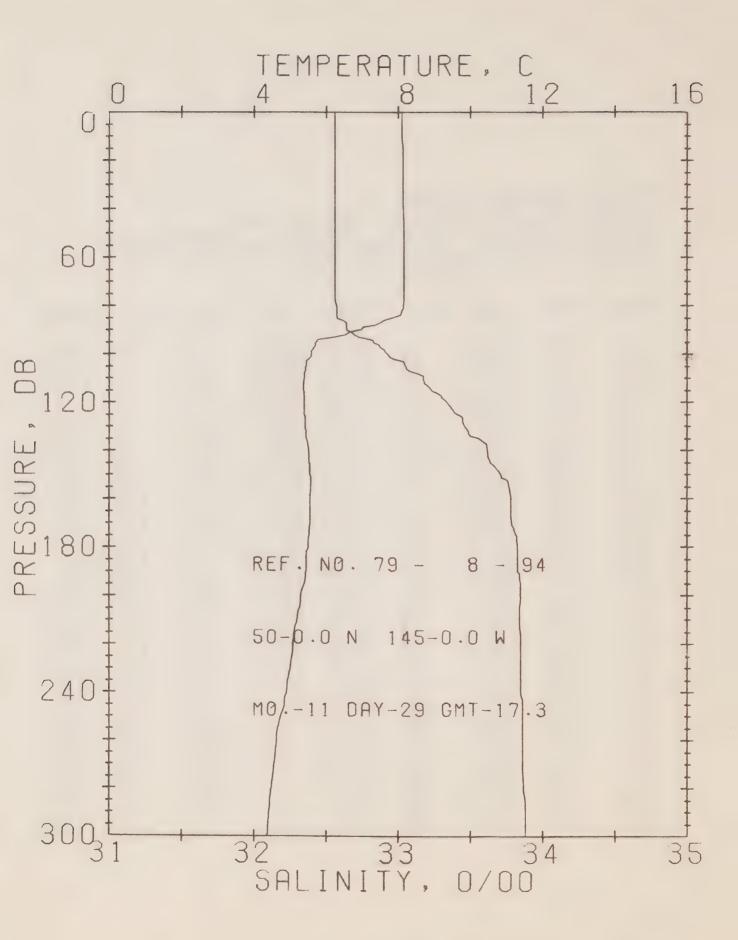
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 93 DATE 28/11/79

POSITION 49-43.0N, 144-42.0W GMT 23.6 STATION P

RESULTS OF STP CAST 183 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	8.19	32.56	0	25.36	262.8	•00	• 0 0	1480.
10	8.19	32.56	10	25.36	263.0	•26	.01	1481.
20	8.19	32.56	20	25.36	263.2	•53	• 05	1481.
30	8.20	32.56	30	25.35	263.4	•79	•12	1481.
40	8.20	32.56	40	25.35	263.6	1.05	.21	1481.
50	8.21	32.56	50	25.35	263.9	1.32	• 34	1481.
60	8.21	32.56	60	25.35	264.0	1.58	•48	1482.
70	8.20	32.57	70	25.36	263.5	1.84	•66	1482.
80	7.21	32.60	80	25.53	247.7	2.10	•86	1478.
90	5.84	32.69	89	25.78	223.8	2.34	1.06	1473.
100	5.53	32.76	99	25.87	215.4	2.56	1.27	1472.
110	5.36	32.89	109	25.99	203.9	2.77	1.50	1471.
120	5.25	33.00	119	26.09	194.5	2.97	1.73	1471.
130	5.06	33.21	129	26.27	176.8	3.15	1.96	1471.
140	4.98	33.31	139	26.36	168.5	3.32	2.20	1471.
150	5.07	33.50	149	26.50	155.4	3.48	2.44	1472.
160	5.14	33.60	159	26.57	148.8	3.63	2.68	1472.
170	5.20	33.70	169	26.65	142.1	3.78	2.92	1473.
180	5.20	33.79	179	26.72	135.5	3.92	3.17	1473.
190	5.12	33.82	189	26.75	132.5	4.05	3.42	1473.
200	5.06	33.83	199	26.76	131.2	4.18	3.68	1473.
210	4.98	33.84	209	26.78	129.9	4.31	3.95	1473.
220	4.88	33.87	218	26.82	126.4	4.44	4.24	1473.
230	4.80	33.85	228	26.81	127.1	4.57	4.53	1472.
240	4.59	33.85	238	26.83	124.8	4.69	4.83	1472.
250	4.51	33.84	248	26.83	124.8	4.82	5.14	1472.
260	4.50	33.83	258	26.83	125.6	4.94	5.46	1472.
270	4.45	33.85	268	26.85	123.6	5.07	5.80	1472.
280	4.39	33.86	278	26.86	122.7	5.19	6.14	1472.
290	4.35	33.86	288	26.87	122.0	5.31	6.50	1472.
300	4.32	33.87	298	26.88	121.2	5.43	6.86	1472.
000	. + 0 2	30401	270	2000	ote Cons de W Cons	3.43	0 000	T1150

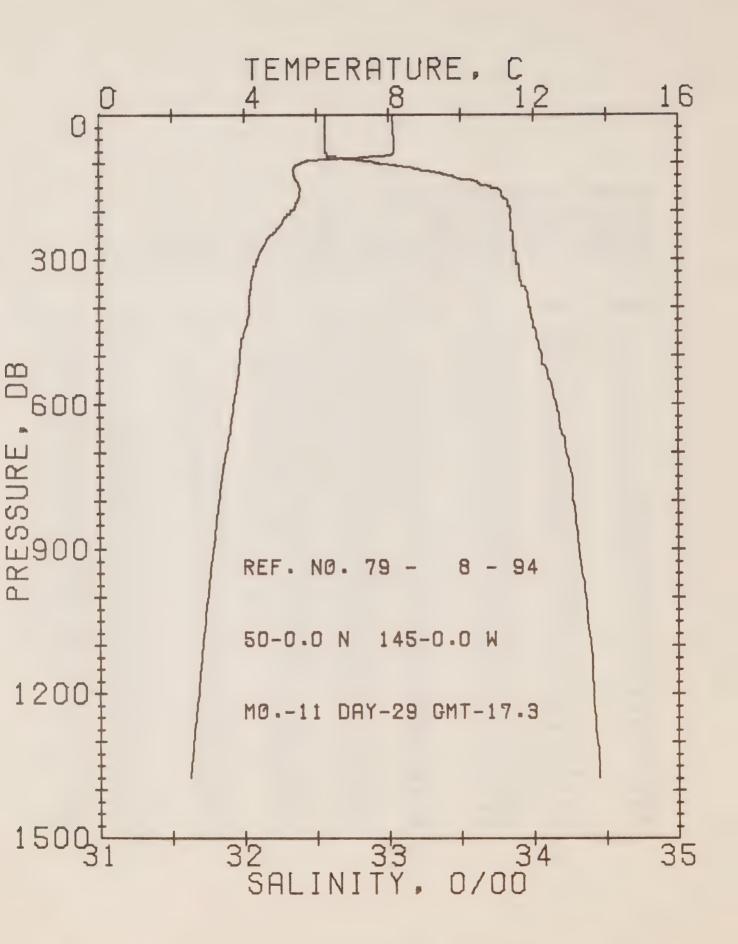


OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 94 DATE 29/11/79

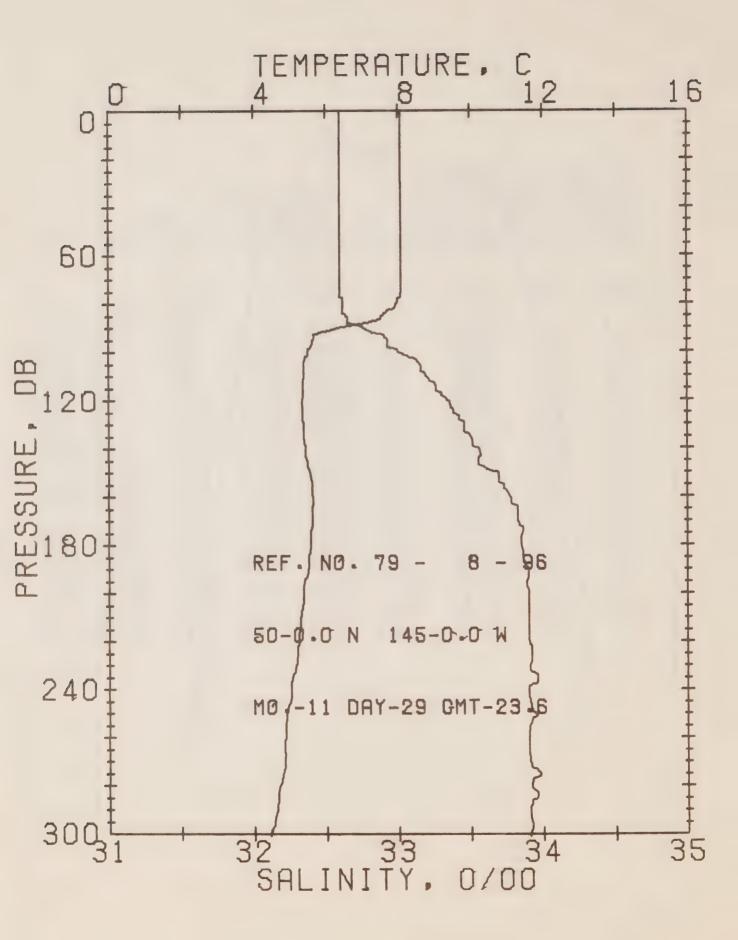
POSITION 50- .0N, 145- .0W GMT 17.3 STATION PRESULTS OF STP CAST 142 POINTS TAKEN FROM ANALOG TRACE GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
	2.40			T		D	EN	
0	8.12	32.56	0	25.37	261.8	• 0 0	• 00	1480.
10	8.12	32.56	10	25.37	261.9	•26	.01	1480.
20	8.13	32.56	20	25.36	262.3	•52	• 05	1481.
30	8.14	32.56	30	25.36	262.6	•79	•12	1481.
40	8.14	32.56	40	25.36	262.8	1.05	.21	1481.
50	8.15	32.56	50	25.36	263.0	1.31	• 33	1481.
60	8,15	32.56	60	25.36	263.2	1.58	•48	1481.
<b>7</b> 0	8.15	32.56	70	25.36	263.3	1.84	•66	1481.
08	8.14	32.57	80	25.37	262.6	2.10	•86	1482.
90	6.95	32.64	89	25.59	241.5	2.36	1.08	1477.
100	5.58	32.93	99	25.99	203.3	2.57	1.29	1472.
110	5.38	33.17	109	26.21	183.2	2.77	1.49	1472.
120	5.39	33.34	119	26.34	171.0	2.94	1.70	1472.
130	5.41	33.46	129	26.43	162.0	3.11	1.91	1473.
140	5.51	33.62	139	26.54	151.6	3.27	2.13	1474.
150	5.55	33.71	149	26.61	145.2	3.42	2.35	1474.
160	5.55	33.78	159	26.67	140.1	3.56	2.57	1474.
170	5.55	33.79	169	26.67	139.7	3.70	2.81	1474.
180	5.49	33.83	179	26.71	136.0	3.83	3.05	1474.
190	5.44	33.83	189	26.72	135.4	3.97	3.31	1474.
200	5.29	33.85	199	26.75	132.3	4.10	3.57	1474.
210	5.17	33.84	209	26.76	131.7	4.24	3.85	1474.
220	5.08	33.85	218	26.78	130.1	4.37	4.14	1473.
230	4.99	33.85	228	26.79	129.1	4.50	4.43	1473.
240	4.88	33.85	238	26.80	128.1	4.62	4.74	1473.
250	4.73	33.86	248	26.83	125.7	4.75	5.06	1472.
260	4.61	33.86	258	26.84	124.5	4.88	5.38	1472.
270	4.55	33.86	268	26.85	123.9	5.00	5.72	1472.
280	4.47	33.87	278	26.86	122.4	5.12	6.06	1472.
290	4.41	33.88	288	26.88	121.1	5.25	6.42	1472.
300	4.35	33.88	298	26.88	120.6	5.37	6.78	1472.



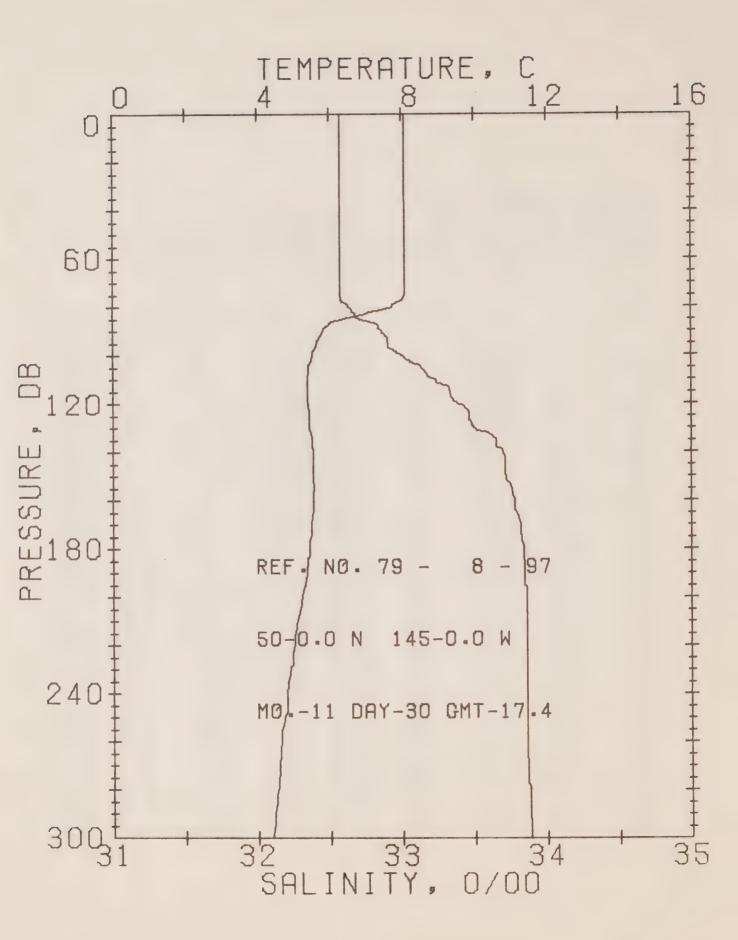
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 94 DATE 29/11/79
POSITION 50- .ON: 145- .OW GMT 17.3 STATION P
RESULTS OF STP CAST 272 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	8.12	32.56	0	25.37	261.8	.00	•00	1480.
10	8.12	32.56	10	25.37	261.9	•26	.01	1480.
20	8.13	32.56	20	25.36	262.3	•52	• 05	1481.
30	8.14	32.56	30	25.36	262.6	•79	.12	1481.
50	8.15	32.56	50	25.36	263.0	1.31	• 33	1481.
75	8.15	32.56	75	25.36	263.4	1.97	•75	1482.
100	5.58	32.93	99	25.99	203.3	2.57	1.29	1472.
125	5.40	33.42	124	26.40	164.9	3.03	1.81	1473.
150	5.55	33.71	149	26.61	145.2	3.42	2.35	1474.
175	5.51	33.82	174	26.70	136.8	3.77	2.93	1474.
200	5.29	33.85	199	26.75	132.3	4.10	3.57	1474.
225	5.04	33.85	223	26.78	129.7	4.43	4.28	1473.
250	4.73	33.86	248	26.83	125.7	4.75	5.06	1472.
300	4.35	33.88	298	26.88	120.6	5.37	6.78	1472.
400	4.13	33.98	397	26.98	111.6	6.53	10.91	1473.
500	3.87	34.06	496	27.07	103.9	7.61	15.86	1473.
600	3.69	34.15	595	. 27.16	95.8	8.61	21.46	1474.
800	3.28	34.27	793	27.30	83.8	10.39	34.13	1476.
1000	2.97	34.36	990	27.40	75.6	11.98	48.72	1478.
1200	2.71	34.41	1188	27.46	69.8	13.43	64.93	1480.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8- 96 DATE 29/11/79
POSITION 50- .0N, 145- .0W GMT 23.6 STATION P
RESULTS OF STP CAST 161 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

T D EN	
	1480.
	1480.
20 8.09 32.60 20 25.40 258.7 .52 .05 1	1480.
30 8.10 32.60 30 25.40 259.0 .78 .12 1	1481.
	1481.
	1481.
	1481.
	1481.
	1481.
	1475.
	1472.
	1472.
	1472.
	1473.
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	1474.
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	1473.
	1473.
	1473.
	1473.
	1473.
300 4.44 33.91 298 26.90 119.3 5.29 6.69	1472.



OFFSHORE OCEANOGRAPHY GROUP

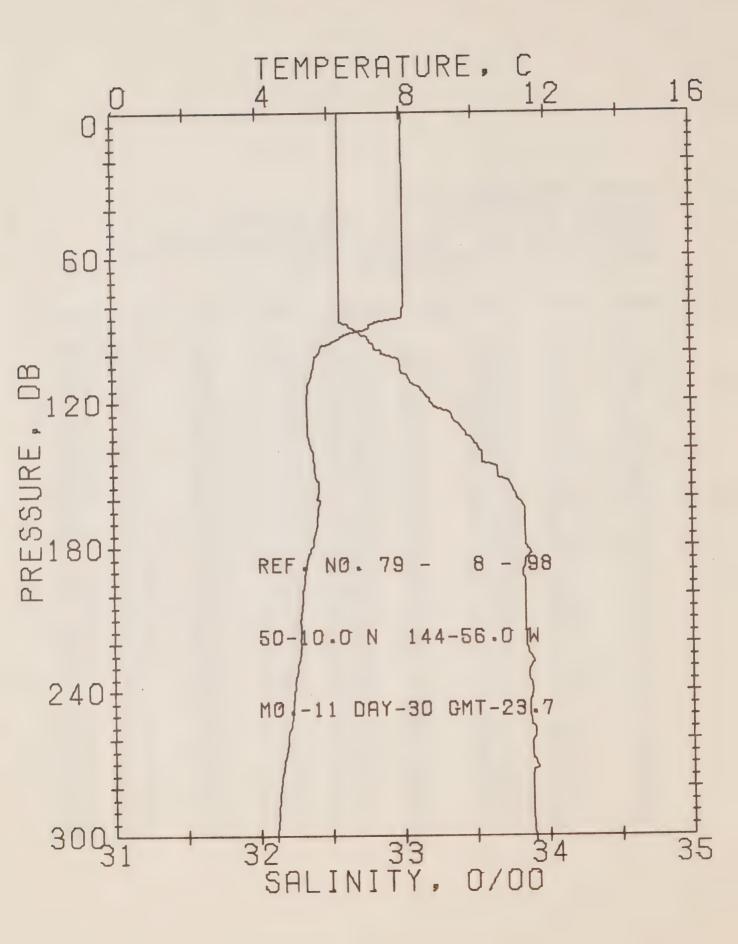
REFERENCE NO. 79-8-97 DATE 30/11/79

POSITION 50-.0N, 145-.0W GMT 17.4 STATION P

RESULTS OF STP CAST 130 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
U	8.08	32.57	0	25.38	260.5	• 0 0	EN •00	1480.
10	8.08	32.57	10	25.38	260.7	•26	.01	1480.
20	8'.09	32.57	20	25.38	260.9	•52	.05	1480.
30	8.09	32.57	30	25.38	261.1	•78	.12	1481.
40	8.10	32.57	40	25.38	261.4	1.04	.21	1481.
50	8.10	32.57	50	25.38	261.6	1.31	•33	1481.
60	8.11	32.57	60	25.38	261.9	1.57	•48	1481.
70	8.11	32.57	70	25.38	262.0	1.83	•65	1481.
80	7.72	32.63	80	25.48	252.3	2.09	.85	1480.
90	5.80	32.86	89	25.91	211.0	2.32	1.05	1473.
100	5.51	33.00	99	26.06	197.2	2.52	1.25	1472.
110	5.38	33.23	109	26.25	178.7	2.71	1.45	1472.
120	5.41	33.39	119	26.38	167.2	2.88	1.65	1473.
130	5.45	33.50	129	26.46	159.5	3.04	1.86	1473.
140	5.54	33.69	139	26.60	146.1	3.20	2.06	1474.
150	5.55	33.72	149	26.62	144.7	3.34	2.28	1474.
160	5.55	33.78	159	26.67	140.1	3.48	2.50	1474.
170	5.50	33.82	169	26.70	136.6	3.62	2.74	1474.
180	5.45	33.84	179	26.73	134.7	3.76	2.98	1474.
190	5.36	33.85	189	26.75	133.0	3.89	3.23	1474.
200	5.22	33.86	199	26.77	130.7	4.02	3.49	1474.
210	5.09	33.86	209	26.78	129.4	4.15	3.77	1473.
220	5.00	33.86	218	26.79	128.5	4.28	4.05	1473.
230	4.90	33.86	228	26.81	127.5	4.41	4.34	1473.
240	4.81	33.86	238	26.82	126.6	4.54	4.65	1473.
250	4.73	33.86	248	26.83	125.7	4.66	4.96	1472.
260	4.63	33.86	258	26.84	124.8	4.79	5.29	1472.
270	4.58	33.87	268	26.85	123.6	4.91	5.62	1472.
280	4.54	33.88	278	26.86	122.4	5.04	5.97	1472.
290	4.45	33.88	288	26.87	121.6	5.16	6.32	1472.
300	4.39	33.89	298	26.89	120.2	5.28	6.69	1472.



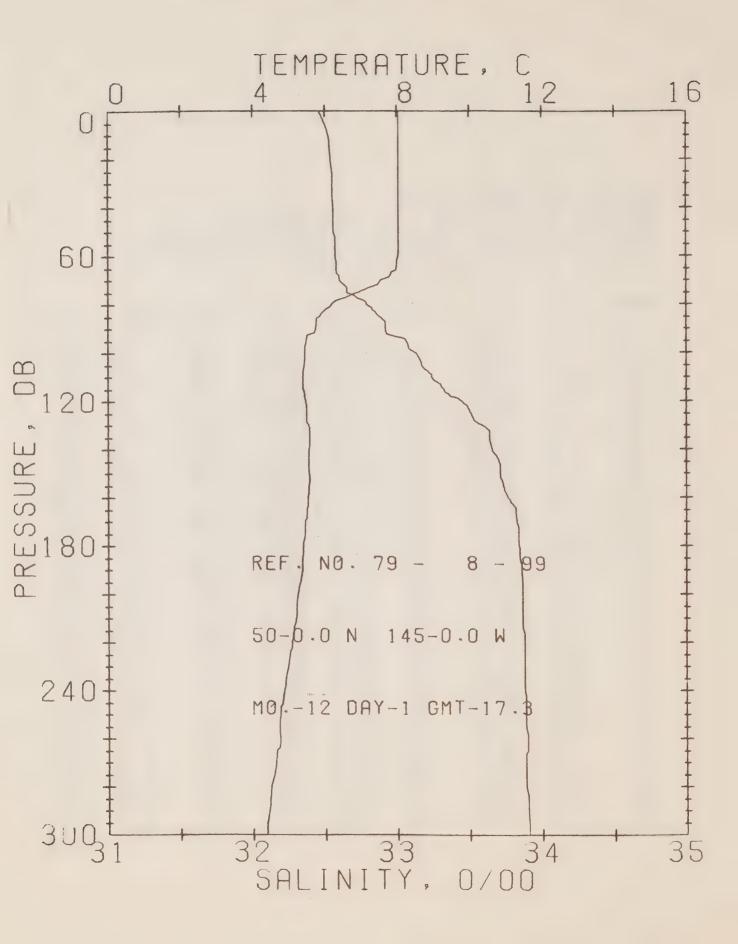
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 98 DATE 30/11/79

POSITION 50-10.0N, 144-56,0W GMT 23.7 STATION P

RESULTS OF STP CAST 151 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
, ,,,,,,	1 621 11	Car / 1 gas		T	/ V / /	D	EN	300110
0	8.06	32.57	0	25.38	260.3	•00	•00	1480.
10	8.05	32.57	10	25.38	260.3	•26	.01	1480.
20	8.06	32.57	20	25.38	260.6	•52	•05	1480.
30	8.07	32.57	30	25.38	260.9	.78	.12	1481.
40	8.07	32.57	40	25.38	261.0	1.04	.21	1481.
50	8.07	32.57	50	25.38	261.2	1.30	• 33	1481.
60	8.08	32.57	60	25.38	261.5	1.56	•48	1481.
70	8.08	32.57	70	25.38	261.6	1.83	•65	1481.
80	8.07	32.57	80	25.38	261.6	2.09	•85	1481.
90	7.01	32.67	89	25.61	240.0	2.34	1.07	1477.
100	5.67	32.86	99	25.93	209.6	2.56	1.29	1473.
110	5.47	33.04	109	26.09	193.9	2.76	1.50	1472.
120	5.36	33.19	119	26.22	181.5	2.95	1.72	1472.
130	5.39	33.40	129	26.39	166.3	3.12	1.94	1473.
140	5.53	33.53	139	26.47	158.3	3.28	2.16	1474.
150	5.59	33.66	149	26.57	149.6	3.44	2.39	1474.
160	5.64	33.79	159	26.66	140.4	3.58	2.62	1475.
170	5.62	33.84	169	26.71	136.6	3.72	2.85	1475.
180	5.48	33.86	179	26.73	133.9	3.86	3.09	1474.
190	5.27	33.83	189	26.74	133.4	3.99	3.34	1474.
200	5.19	33.84	199	26.76	131.9	4.12	3.60	1474.
210	5.13	33.84	209	26.76	131.3	4.25	3.88	1473.
220	5.14	33.85	218	26.77	130.8	4.38	4.17	1474.
230	5.05	33.88	228	26.81	127.6	4.51	4.46	1473.
240	4.94	33.89	238	26.83	125.7	4.64	4.77	1473.
250	4.87	53.87	248	26.82	126.5	4.77	5.08	1473.
260	4.75	33.89	258	26.85	123.8	4.89	5.41	1473.
270	4.63	33.91	268	26.88	121.1	5.01	5.74	1472.
280	4.54	33.88	278	26.86	122.4	5.14	6.08	1472.
290	4.47	33.88	288	26.87	121.8	5.26	6.44	1472.
300	4.43	33.89	298	26.89	120.3	5.38	6.80	1472.



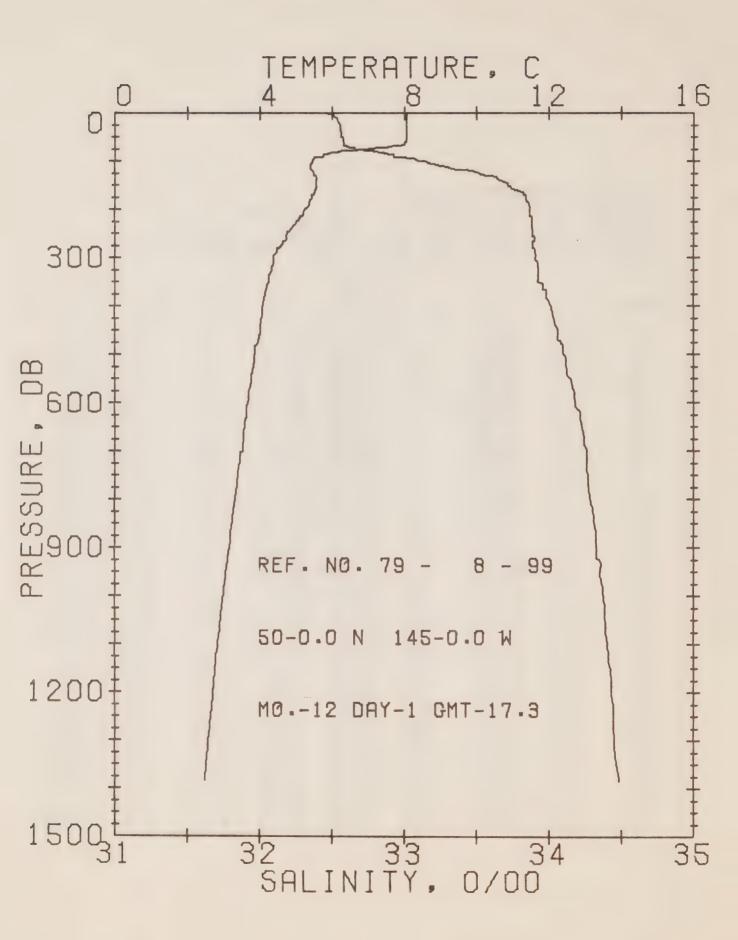
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8- 99 DATE 1/12/79

POSITION 50- .ON, 145- .OW GMT 17.3 STATION P

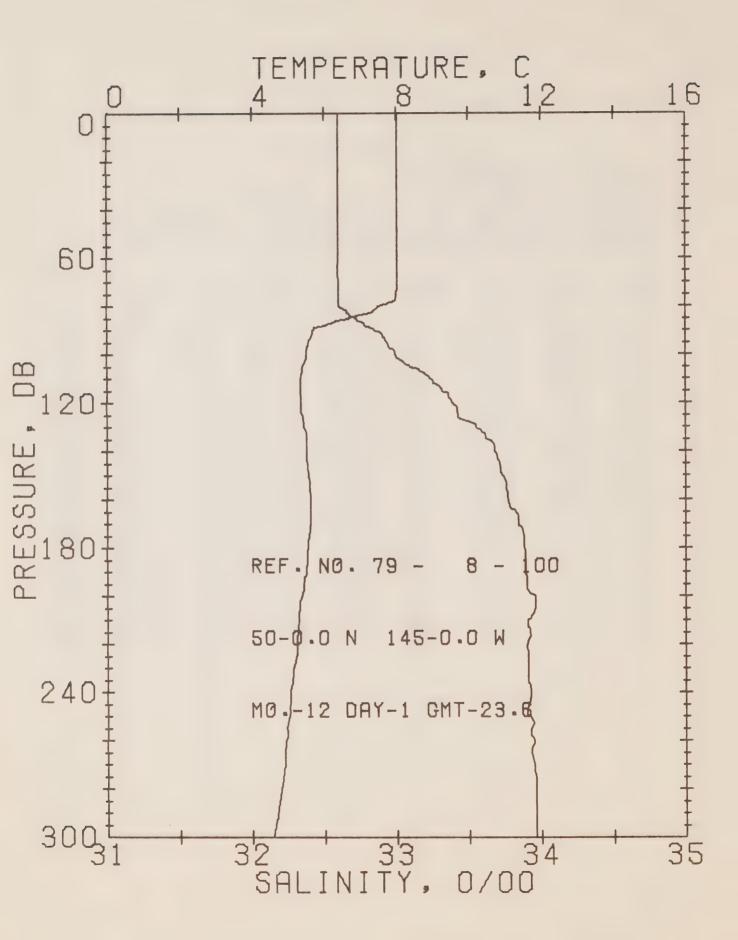
RESULTS OF STP CAST 150 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	8.05	32.46	0	25.30	268.3	•00	•00	1480.
10	8.05	32.52	10	25.35	263.8	.27	.01	1480.
20	8.05	32.54	20	25.36	262.7	•53	• 05	1480.
30	8.05	32.55	30	25.37	262.1	.79	.12	1480.
40	8.06	32.56	40	25.37	261.6	1.05	.21	1481.
50	8.05	32.56	50	25.38	261.6	1.31	• 33	1481.
60	8.04	32.57	60	25.38	261.0	1.58	•48	1481.
70	7.54	32.60	70	25.48	252.0	1.83	•65	1479.
80	6.18	32.79	80	25.81	220.6	2.07	.83	1474.
90	5.74	32.92	89	25.97	205.8	2.28	1.01	1473.
100	5.44	33.13	99	26.17	186.7	2.48	1.20	1472.
110	5.40	33.24	109	26.26	178.2	2.66	1.40	1472.
120	5.46	33.45	119	26.42	163.2	2.83	1.60	1473.
130	5,55	33.59	129	26.52	153.9	2.99	1.80	1474.
140	5.56	33.65	139	26.57	149.3	3.14	2.01	1474.
150	5.56	33.71	149	26.61	145.3	3.29	2.23	1474.
160	5.53	33.77	159	26.66	140.6	3.43	2.45	1474.
170	5.45	33.83	169	26.72	135.3	3.57	2.68	1474.
180	5.39	33.84	179	26.74	133.7	3.70	2.92	1474.
190	5.36	33.86	189	26.75	132.2	3.84	3.17	1474.
200	5.23	33.87	199	26.78	130.1	3.97	3.43	1474.
210	5.19	33.87	209	26.78	129.7	4.10	3.71	1474.
220	5.06	33.88	218	26.80	127.6	4.23	3.99	1473.
230	4.98	33.88	228	26.81	126.8	4.35	4.28	1473.
240	4.86	33.88	238	26.83	125.6	4.48	4.58	1473.
250	4.75	33.89	248	26.85	123.7	4.60	4.89	1473.
260	4.74	33.90	258	26.86	123.0	4.73	5.21	1473.
270	4.61	33.89	268	26.86	122.3	4.85	5.54	1472.
280	4.49	33.89	278	26.88	121.1	4.97	5.89	1472.
290	4.43	33.90	288	26.89	119.7	5.09	6.23	1472.
300	4.38	33.91	298	26.90	118.6	5.21	6.59	1472.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79-8-99 DATE 1/12/79
POSITION 50-.0N. 145-.0W GMT 17.3 STATION P
RESULTS OF STP CAST 271 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA D	POT. EN	SOUND
Ü	8.05	32.46	0	25.30	268.3	•00	•00	1480.
10	8.05	32.52	10	25.35	263.8	•27	.01	1480.
20	8.05	32.54	20	25.36	262.7	•53	• 05	1480.
30	8.05	32.55	30	25.37	262.1	•79	•12	1480.
50	8.05	32.56	50	25.38	261.6	1.31	•33	1481.
75	6.91	32.65	75	25.61	240.0	1.96	.74	1477.
100	5.44	33.13	99	26.17	186.7	2.48	1.20	1472.
125	5.50	33.51	124	26.46	159.0	2.91	1.70	1473.
150	5.56	33.71	149	26.61	145.3	3.29	2.23	1474.
175	5.43	33.84	174	26.73	134.4	3.64	2.80	1474.
200	5.23	33.87	199	26.78	130.1	3.97	3.43	1474.
225	5.01	33.88	223	26.81	127.2	4.29	4.13	1473.
250	4.75	33.89	248	26.85	123.7	4.60	4.89	1473.
300	4.38	33.91	298	26.90	118.6	5.21	6.59	1472.
400	4.07	34.01	397	27.01	109.0	6.35	10.67	1472.
500	3.85	34.10	496	27.11	100.5	7.40	15.48	1473.
600	3.65	34.18	595	27.19	93.4	8.37	20.91	1474.
800	3.29	34.29	793	27.31	82.9	10.12	33.33	1476.
1000	2.97	34.37	990	27.41	74.2	11.69	47.69	1478.
1200	2.69	34.43	1188	27.48	68.2	13.11	63.63	1480.



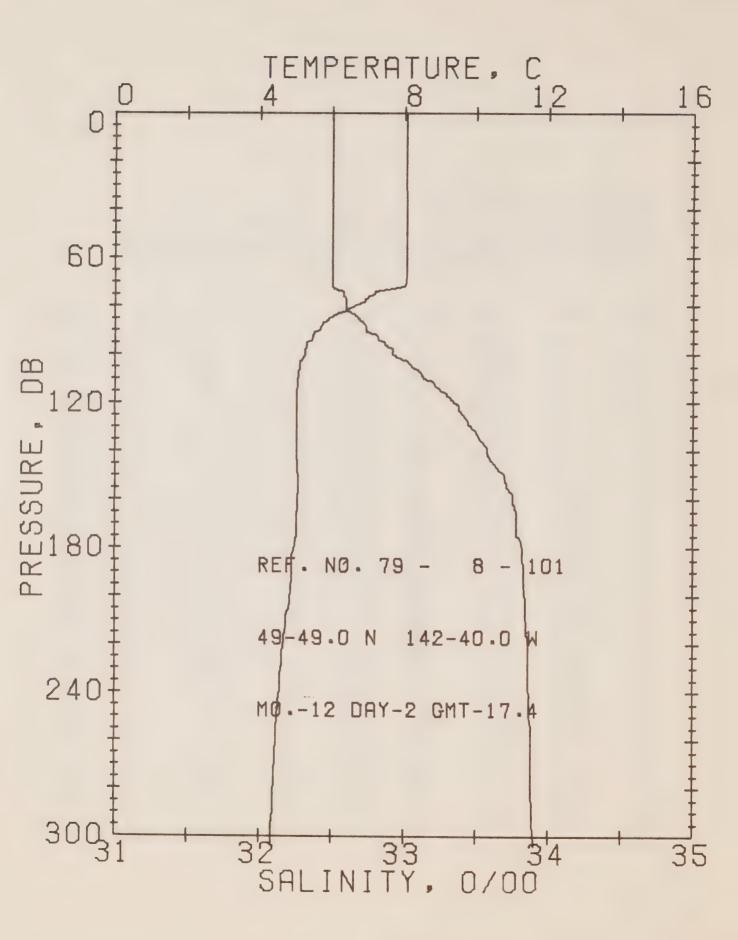
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-100 DATE 1/12/79

POSITION 50- .0N. 145- .0W GMT 23.6 STATION P

RESULTS OF STP CAST 152 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	s <sup>V</sup> A	DELTA	POT.	SOUND
0	8.02	32.60	0	25.41	257.5	• 0 0	•00	1480.
10	8.02	32.60	10	25.41	257.6	•26	•01	1480.
20	8.02	32.60	20	25.41	257.8	•52	•05	1480.
30	8.03	32.60	30	25.41	258.0	•77	.12	1480.
40	8.03	32.60	40	25.41	258.2	1.03	.21	1481.
50	8:03	32.60	50	25.41	258.4	1.29	•33	1481.
60	8.03	32.60	60	25.41	258.6	1.55	.47	1481.
70	8:02	32.60	70	25.41	258.7	1.81	•65	1481.
80	7.49	32.60	80	25.49	251.4	2.06	.84	1479.
90	5.69	32.85	89	25.92	210.4	2.30	1.04	1472.
100	5.50	32.99	99	26.05	197.9	2.50	1.24	1472.
110	5.34	33.23	109	26.26	178.2	2.69	1.44	1472.
120	5.35	33.39	119	26.38	166.5	2.86	1.64	1472.
130	5.44	33.55	129	26.50	155.7	3.02	1.85	1473.
140	5.52	33.68	139	26.59	147.0	3.17	2.06	1474.
150	5.58	33.73	149	26.62	144.1	3.32	2.27	1474.
160	5.64	33.77	159	26.65	141.7	3.46	2.50	1475.
170	5.63	33.84	169	26.70	136.7	3.60	2.73	1475.
180	5.53	33.88	179	26.75	132.3	3.73	2.97	1475.
190	5.49	33.89	189	26.76	131.5	3.86	3.22	1475.
200	5.35	33.96	199	26.83	124.8	3.99	3.47	1474.
210	5.27	33.91	209	26.80	127.7	4.12	3.73	1474.
220	5.23	33.91	218	26.80	127.7	4.25	4.01	1474.
230	5.13	33.91	228	26.82	126.3	4.37	4.30	1474.
240	5.05	33.93	238	26.85	123.9	4.50	4.60	1474.
250	5.01	33.92	248	26.84	124.4	4.62	4.92	1474.
260	4.91	33.95	258	20.88	121.1	4.75	5.24	1473.
270	4.87	33.95	268	26.88	120.8	4.87	5.56	1473.
280	4.77	33.96	278	26.90	119.0	4.99	5.90	1473.
290	4.69	33.96	288	26.91	118.2	5.11	6.25	1473.
300	4.57	33.96	298	26.92	117.0	5.22	6.60	1473.



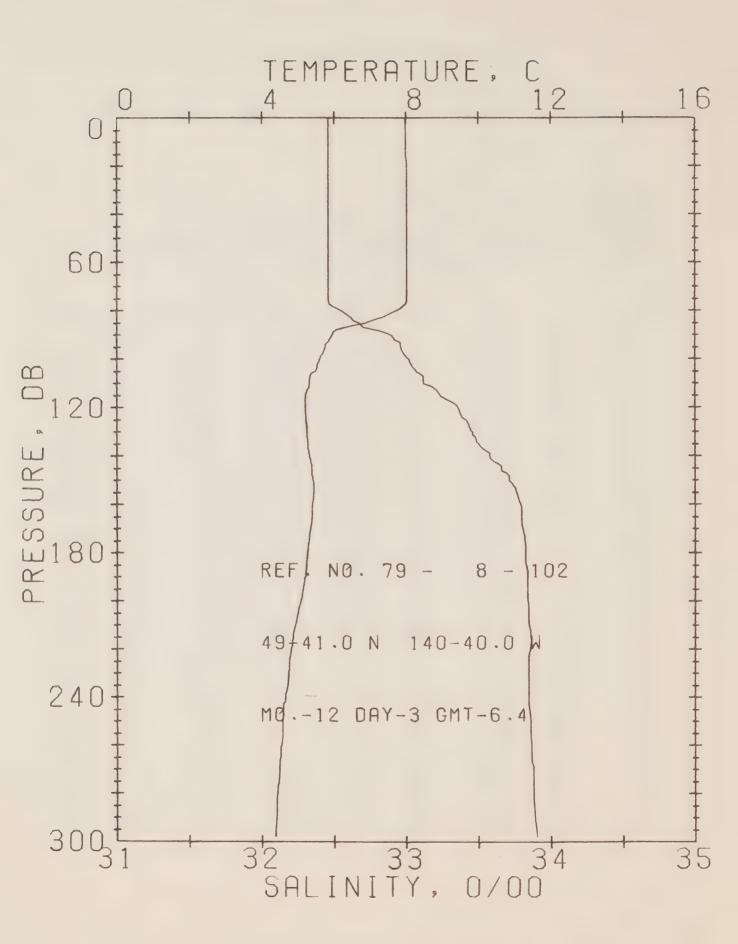
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-101 DATE 2/12/79

POSITION 49-49.0N, 142-40.0W GMT 17.4 STATION 12

RESULTS OF STP CAST 137 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	E.N	
0	8.05	32.50	0	25.33	265.3	•00	.00	1480.
10	8.05	32.50	10	25.33	265.5	•27	.01	1480.
20	8.06	32.50	20	25.33	265.8	•53	.05	1480.
30	8.06	32.50	30	25.33	265.9	•80	.12	1480.
40	8.07	32.50	40	25.33	266.2	1.06	.22	1481.
50	8.07	32.50	50	25.33	266.4	1.33	• 34	1481.
60	8.08	32.50	60	25.32	266.7	1.60	•49	1481.
70	8.06	32.50	70	25.33	266.5	1.86	.67	1481.
80	6.61	32.59	80	25.60	240.8	2.11	.86	1476.
90	5.66	32.73	89	25.83	219.1	2.34	1.05	1472.
100	5.25	32.92	99	26.02	200.3	2.55	1.26	1471.
110	5.05	33.13	109	26.21	182.5	2.74	1.46	1471.
120	5.01	33.35	119	26.39	165.7	2.91	1.66	1471.
130	5.01	33.47	129	26.49	156.8	3.07	1.87	1471.
140	5.02	33.57	139	26.56	149.5	3.23	2.08	1471.
150	5.06	33.69	149	26.65	141.1	3.37	2.29	1472.
160	5.05	33.75	159	26.70	136.5	3.51	2.51	1472.
170	5.01	33.78	169	26.73	134.0	3.65	2.74	1472.
180	4.95	33.82	179	26.77	130.7	3.78	2.98	1472.
190	4.88	33.83	189	26.78	129.0	3.91	3.22	1472.
200	4.83	33.84	199	26.80	128.1	4.04	3.48	1472.
210	4.73	33.84	209	26.81	126.5	4.16	3.74	1472.
220	4.65	33.86	218	26.83	124.5	4.29	4.02	1472.
230	4.59	33.86	228	26.84	123.9	4.41	4.30	1472.
240	4.55	33.86	238	26.85	123.3	4.54	4.60	1472.
250	4.48	33.87	248	26.86	122.3	4.66	4.90	1471.
260	4.45	33.88	258	26.87	121.2	4.78	5.22	1471.
270	4.42	33.88	268	26.87	121.0	4.90	5.55	1472.
280	4.39	33.88	278	26.88	120.8	5.02	5.89	1472.
290	4.37	33.89	288	26.89	120.0	5.14	6.24	1472.
300	4.32	33.90	298	26.90	119.0	5.26	6.60	1472.



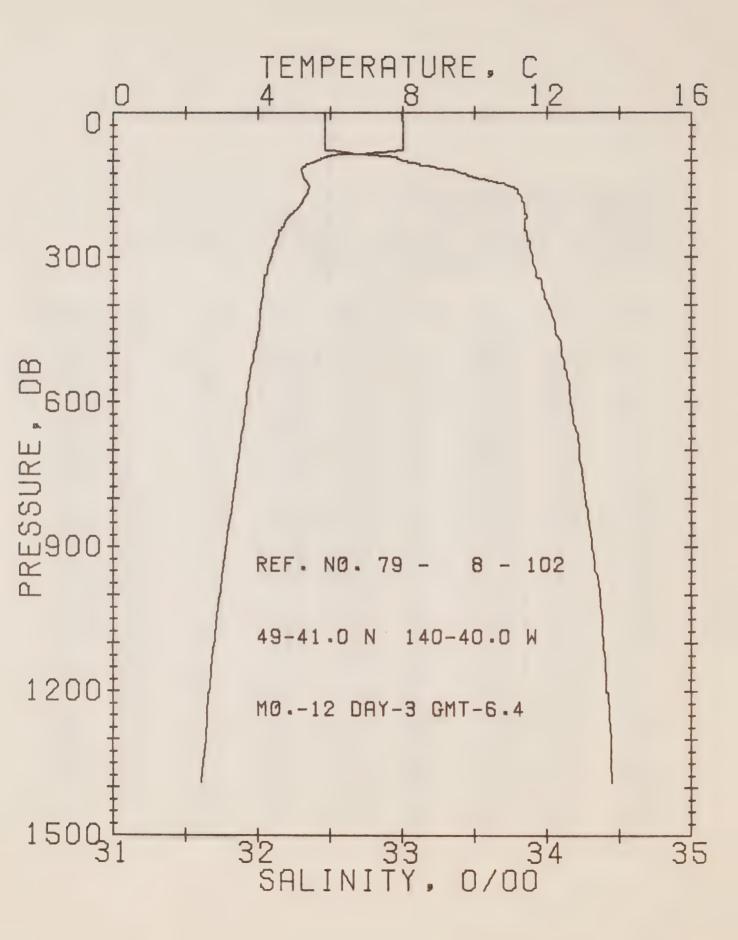
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-102 DATE 3/12/79

POSITION 49-41.0N, 140-40.0W GMT 6.4 STATION 11

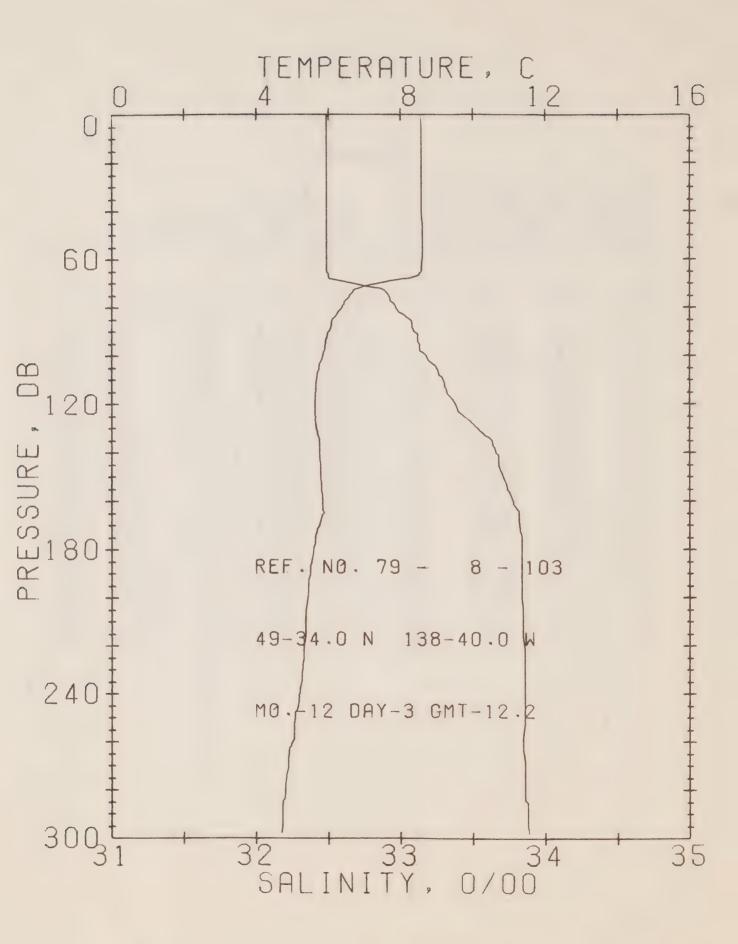
RESULTS OF STP CAST 141 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	7' 00	30 41	0	T 7.	0/7 7	D	EN	4400
0 10	7.98	32.46	0	25.31	267.3	•00	•00	1480.
	8.00	32.46	10	25.31	267.8	•27	•01	1480.
20	8.02	32.46	20	25.30	268.2	•54	.05	1480.
30	8.02	32.46	30	25.30	268.3	•80	.12	1480.
40	8.03	32.46	40	25.30	268.6	1.07	•55	1480.
50	8.03	32.46	50	25.30	268.8	1.34	- 34	1481.
60	8.03	32.46	60	25.30	268.9	1.61	•49	1481.
70	8.03	32.46	70	25.30	269.1	1.88	•67	1481.
80	7.73	32.55	80	25.41	258.4	2.15	•88	1480.
90	5.95	32.90	89	25.92	209.7	2.38	1.08	1474.
100	5.59	33.02	99	26.06	196.7	2.59	1.28	1472.
110	5.31	33.12	109	26.17	186.1	2.78	1.48	1472.
120	5.21	33.36	119	26.38	167.1	2.95	1.69	1472.
130	5.25	33.46	129	26.45	160.2	3.12	1.89	1472.
140	5.32	33.58	139	26.54	152.2	3.27	2.11	1473.
150	5.42	33.71	149	26.63	143.7	3.42	2.33	1473.
160	5.41	33.79	159	26.69	137.4	3.56	2.55	1474.
170	5.35	33.81	169	26.71	135.8	3.70	2.78	1474.
180	5.26	33.83	179	26.74	133.2	3.83	3.02	1473.
190	5.19	33.84	189	26.76	131.8	3.96	3.27	1473.
200	5.08	33.84	199	26.77	130.4	4.09	3.53	1473.
210	4.91	33.85	209	26.80	127.9	4.22	3.80	1473.
220	4.80	33.86	218	26.82	126.2	4.35	4.08	1472.
230	4.72	33.85	228	26.82	126.2	4.48	4.37	1472.
240	4.64	33.85	238	26.83	125.4	4.60	4.67	1472.
250	4.57	33.86	248	26.84	124.0	4.73	4.98	1472.
260	4.54	33.87	258	26.85	123.0	4.85	5.30	1472.
270	4.47	33.88	268	26.87	121.6	4.97	5.63	1472.
280	4.43	33.88	278	26.87	121.2	5.09	5.97	1472.
290	4.39	33.89	288	26.89	120.0	5.22	6.32	1472.
300	4.35	33.90	298	26.90	119.1	5.33	6.68	1472.



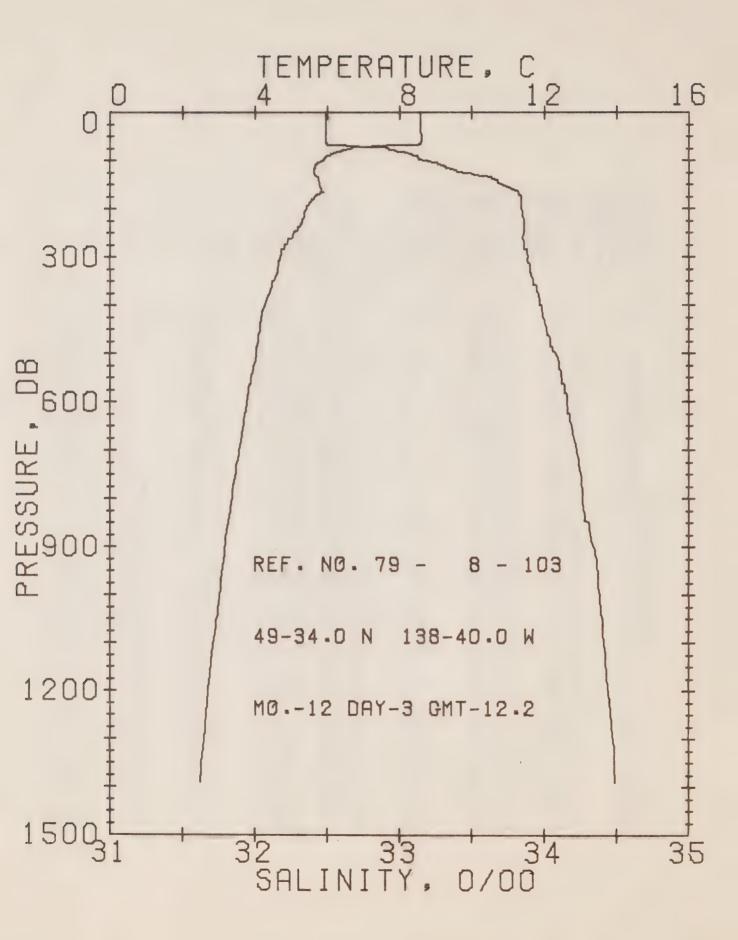
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8-102 DATE 3/12/79
POSITION 49-41.0N, 140-40.0W GMT 6.4 STATION 11
RESULTS OF STP CAST 248 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	7.98	32.46	0	25.31	267.3	•00	•00	1480.
10	8.00	32.46	10	25.31	267.8	•27	.01	1480.
20	8.02	32.46	20	25.30	268.2	•54	.05	1480.
30	8.02	32.46	30	25.30	268.3	•80	.12	1480.
50	8.03	32.46	50	25.30	268.8	1.34	.34	1481.
<b>7</b> 5	8.02	32.46	75	25.30	269.0	2.01	.77	1481.
100	5.59	33.02	99	26.06	196.7	2.59	1.28	1472.
125	5.22	33.42	124	26.42	162.8	3.03	1.79	1472.
150	5.42	33.71	149	26.63	143.7	3.42	2.33	1473.
175	5.29	33.82	174	26.73	134.0	3.76	2.90	1473.
200	5.08	33.84	199	26.77	130.4	4.09	3.53	1473.
225	4.76	33.85	223	26.81	126.5		4.22	1472.
						4.41		
250	4.57	33.86	248	26.84	124.0	4.73	4.98	1472.
300	4.35	33.90	298	26.90	119.1	5.33	6.68	1472.
400	4.08	34.01	397	27.01	109.1	6.48	10.74	1472.
500	3.89	34.10	496	27.10	100.9	7.52	15.54	1473.
600	3.67	34.16	595	27.17	94.9	8.50	21.00	1474.
800	3.31	34.26	793	27.29	84.8	10.29	33.75	1476.
1000	2.93	34.36	990	27.40	74.8	11.88	48.30	1478.
1200	2.65	34.41	1138	27.47	69.2	13.31	64.32	1480.



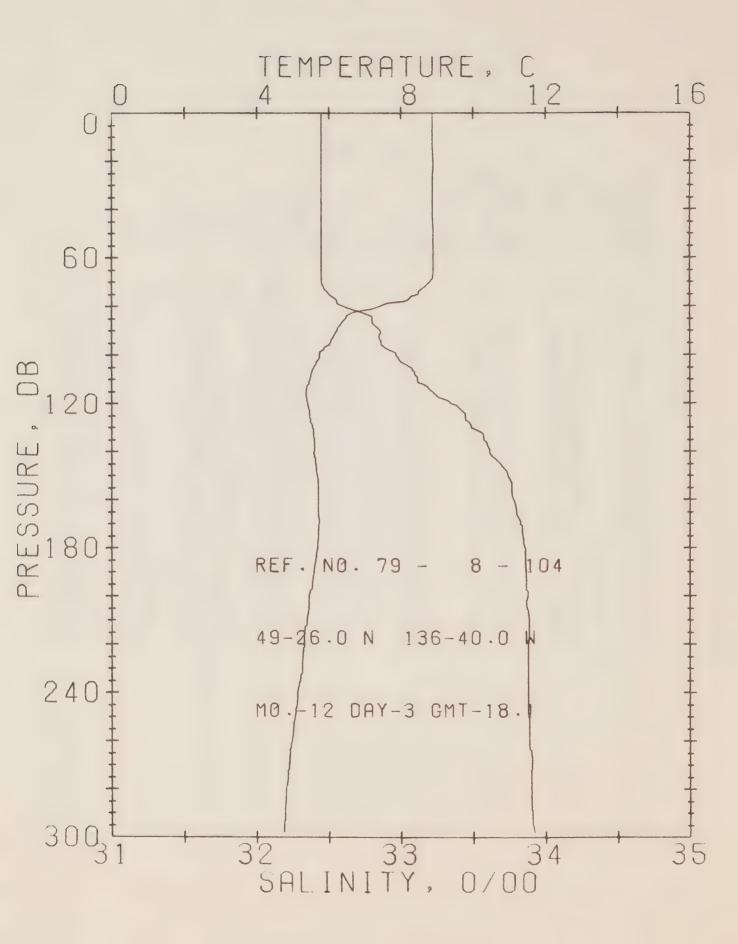
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8-103 DATE 3/12/79
POSITION 49-34.0N. 138-40.0W GMT 12.2 STATION 10
RESULTS OF STP CAST 141 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	8.57	32.49	0	T 25.24	273.4	D	EN	1482.
10	8.58	32.49	10	25.24	273.7	•00 •27	•00	1482.
20	8.58	32.49	20	25.24	273.9			
		32.49	30	25.24		• 55	• 06	1482.
30	8.60 8.60	32.49		25.24	274.3	.82	•13	1482.
40 50	8.61	32.49	40 50	25.24	274.5	1.10	•22	1483.
60	8.61	32.49	60	25.24	274.9	1.37	• 35	1483.
70	7.41	32.67	70	25.55	245.0	1.65	•50	1483. 1479.
80	6.38	32.97	80	25.93	209.6	1.92 2.13	•68 •85	1475.
90	6.02	33.09	89	26.07	196.4	2.34	1.02	1474.
100	5.85	33.18	99	26.16				1474.
110	5.67	33.30	109	26.27	187.7 176.7	2.53	1.21	1473.
120	5.63	33.38	119			2.71	1.41	
130	5.68	33.53	129	26.34	170.4 159.7	2.88	1.61	1473.
140	5.77	33.66	139	26.46	_	3.05	1.82	1474.
150	5.79	33.71	149	26.55	151.4	3.21	2.03	1475.
	5.84			26.59	147.8	3.35	2.25	1475.
160 170	5.74	33.78 33.83	159 169	26.63	143.6	3.50	2.48	1475. 1475.
	5.58		179	26.68	139.0	3.64		
180		33.84		26.71	136.2	3.78	2.97	1475.
190	5.48	33.84	189	26.72	135.1	3.91	3.22	1475.
200	5.42	33.84	199	26.73	134.6	4.05	3.49	1474.
210	5.36	33.85	209	26.75	133.2	4.18	3.77	1474.
220	5.33	33.86	218	26.76	132.3	4.32	4.06	1474.
230	5,27	33.86	228	26.76	131.7	4.45	4.36	1474.
240	5.20	33.86	238	26.77	130.9	4.58	4.68	1474.
250	5.06	33.86	248	26.79	129.5	4.71	5.00	1474.
260	5.00	33.85	258	26.79	129.6	4.84	5.34	
270	4.88	33.86	268	26.81	127.7	4.97	5.69	1473.
280	4.80	33.86	278	26.82	126.8	5.09	6.04	1473.
290	4'•73 4'•69	33.88	288 298	26.84	124.6	5.22	6.41	1473. 1473.
300	4.09	33.89	270	26.85	123.6	5.34	6.78	1410.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8-103 DATE 3/12/79
POSITION 49-34.0N, 138-40.0W GMT 12.2 STATION 10
RESULTS OF STP CAST 283 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	8.57	32.49	0	25.24	273.4	•00	.00	1482.
10	8.58	32.49	10	25.24	273.7	•27	.01	1482.
20	8.58	32.49	20	25.24	273.9	•55	.06	1482.
30	8.60	32.49	30	25.24	274.3	•82	.13	1482.
50	8.61	32.49	50	25.24	274.8	1.37	• 35	1483.
75	6.60	32.92	75	25.86	216.0	2.03	.77	1476.
100	5.85	33.18	99	26.16	187.7	2.53	1.21	1474.
125	5.63	33.44	124	26.39	166.0	2.97	1.71	1474.
150	5.79	33.71	149	26.59	147.8	3.35	2.25	1475.
175	5.63	33.84	174	26.70	136.7	3.71	2.84	1475.
200	5.42	33.84	199	26.73	134.6	4.05	3.49	1474.
225	5.30	33.86	223	26.76	132.0	4.38	4.21	1474.
250	5.06	33.86	248	26.79	129.5	4.71	5.00	1474.
300	4.69	33.89	298	26.85	123.6	5.34	6.78	1473.
400	4.26	33.97	397	26.97	113.6	6.53	11.02	1473.
500	4.03	34.07	496	27.07	104.4	7.63	16.03	1474.
600	3.76	34.15	595	27.16	96.6	8.63	21.63	1475.
800	3.34	34.26	793	27.29	85.4	10.44	34.50	1476.
1000	3.00	34.38	990	27.41	74.2	12.02	48.95	1478.
1200	2.70	34.44	1188	27.49	67.5	13.43	64.80	1480.



OFFSHORE OCEANOGRAPHY GROUP

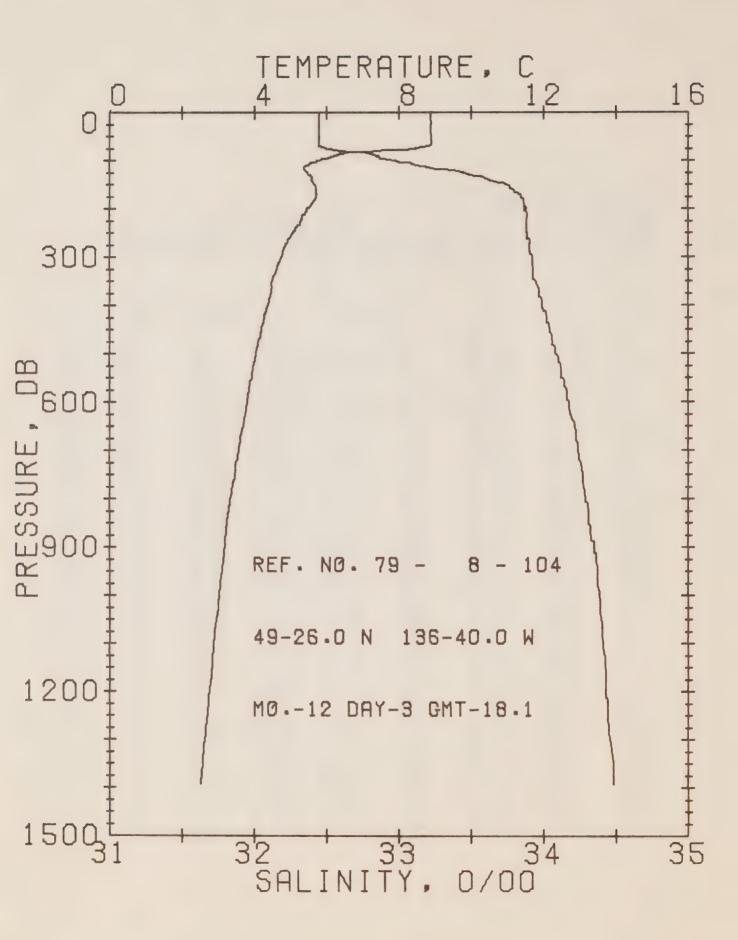
REFERENCE NO. 79- 8-104 DATE 3/12/79

POSITION 49-26.0N, 136-40.0W GMT 18.1 STATION 9

RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE

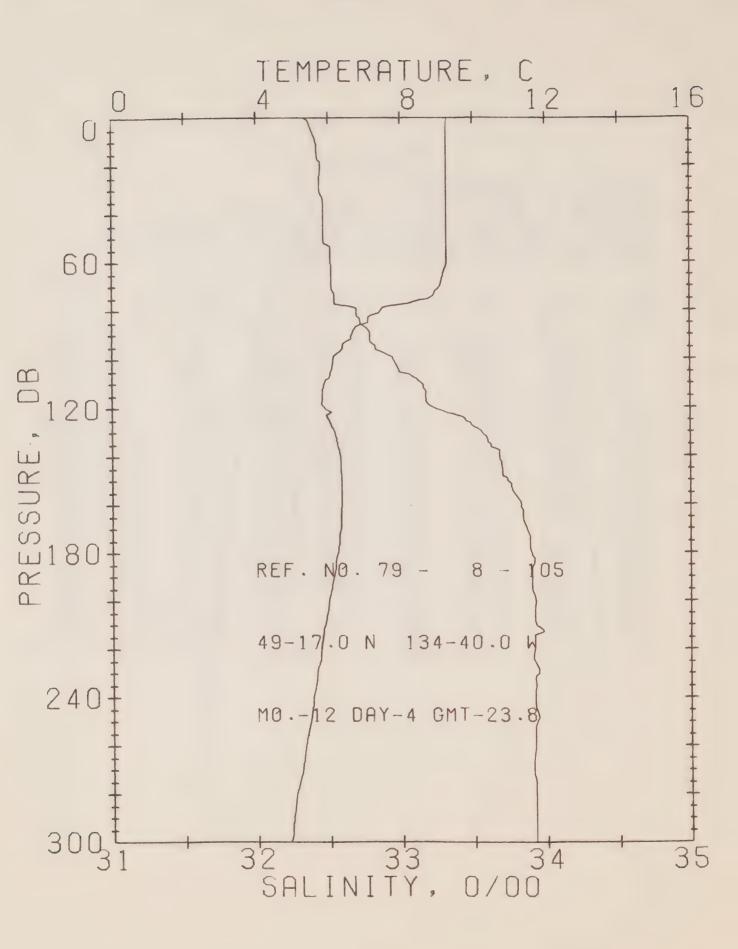
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT. EN	SOUND
0	8-89	32.45	0	25.16	281.0	•00	•00	1483.
10	8.89	32.45	10	25.16	281.2	•28	.01	1483.
20	8.90	32.45	20	25.16	281.5	• 56	.06	1483.
30	8.89	32.45	30	25.16	281.5	•84	•13	1483.
40	8.89	32.45	40	25.16	281.7	1.13	•13	1484.
50	8.90	32.45	50	25.16	282.0	1.41	• 36	1484.
60	8.90	32.45	60	25.16	282.2	1.69	•52	1484.
70	8.81	32.45	70	25.18	281.0	1.97	.70	1484.
80	7.42	32.60	80	25.50	250.5	2.24	.91	1479.
90	6.21	32.86	89	25.86	215.8	2.47	1.11	1475.
100	5.72	32.97	99	26.01	201.9	2.68	1.31	1473.
110	5.47	33.11	109	26.15	188.7	2.87	1.52	1472.
120	5.41	33.35	119	26.34	170.2	3.05	1.73	1472.
130	5.54	33.49	129	26.44	161.3	3.22	1.94	1473.
140	5.59	33.61	139	26.53	153.0	3.37	2:15	1474.
150	5.68	33.74	149	26.62	144.5	3.52	2.37	1475.
160	5.71	33.78	159	26.65	141.7	3.66	2.60	1475.
170	5.72	33.83	169	26.69	138.5	3.81	2.83	1475.
180	5.67	33.86	179	26.72	135.8	3.94	3.08	1475.
190	5.57	33.87	189	26.74	134.0	4.08	3.33	1475.
200	5.45	33.88	199	26.76	131.9	4.21	3.60	1475.
210	5.39	33.89	209	26.77	130.6	4.34	3.87	1475.
220	5.30	33.88	218	26.78	130.2	4.47	4.16	1474.
230	5,25	33.88	228	26.78	129.9	4.60	4.46	1474.
240	5.12	33.88	238	26.80	128.5	4.73	4.77	1474.
250	5.06	33.88	248	26.81	127.5	4.86	5.09	1474.
260	4.96	33.89	258	26.82	126.2	4.99	5.42	1474.
270	4.89	33.91	268	26.85	124.0	5.11	5.75	1474.
280	4.81	33.90	278	26.85	123.9	5.24	6.10	1473.
290	4.78	33.91	288	26.86	123.0	5.36	6.46	1473.
300	4.73	33.92	298	26.87	121.7	5.48	6.83	1473.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8-104 DATE 3/12/79
POSITION 49-26.0N, 136-40.0W GMT 18.1 STATION 9
RESULTS OF STP CAST 302 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
Ü	8 • 89	32.45	0	25.16	281.0	•00	.00	1483.
10	8.89	32.45	10	25.16	281.2	•28	.01	1483.
20	8.90	32.45	20	25.16	281.5	•56	•06	1483.
30	8.89	32.45	30	25.16	281.5	•84	.13	1483.
50	8.90	32.45	50	25.16	282.0	1.41	• 36	1484.
75	8.48	32.50	75	25.27	272.6	2.11	.81	1483.
100	5.72	32.97	99	26.01	201.9	2.68	1.31	1473.
125	5.46	33.45	124	26.42	163.3	3.14	1.83	1473.
150	5.68	33.74	149	26.62	144.5	3.52	2.37	1475.
175	5.70	33.84	174	26.70	137.2	3.87	2.95	1475.
200	5.45	33.88	199	26.76	131.9	4.21	3.60	1475.
225	5.26	33.88	223	26.78	130.0	4.54	4.31	1474.
250	5.06	33.88	248	26.81	127.5	4.86	5.09	1474.
300	4.73	33.92	298	26.87	121.7	5.48	6.83	1473.
400	4.35	33.99	397	26.97	113.2	6.66	11.02	1473.
500	4.02	34.08	496	27.08	103.5	7.74	15.98	1474.
600	3.78	34.17	595	27.17	95.5	8.74	21.55	1475.
800	3.32	34.29	793	27.31	83.0	10.51	34.19	1476.
1000	3.01	34.38	990	27.41	74.1	12.07	48.47	1478.
1200	2.75	34.43	1188	27.48	68.8	13.50	64.41	1480.



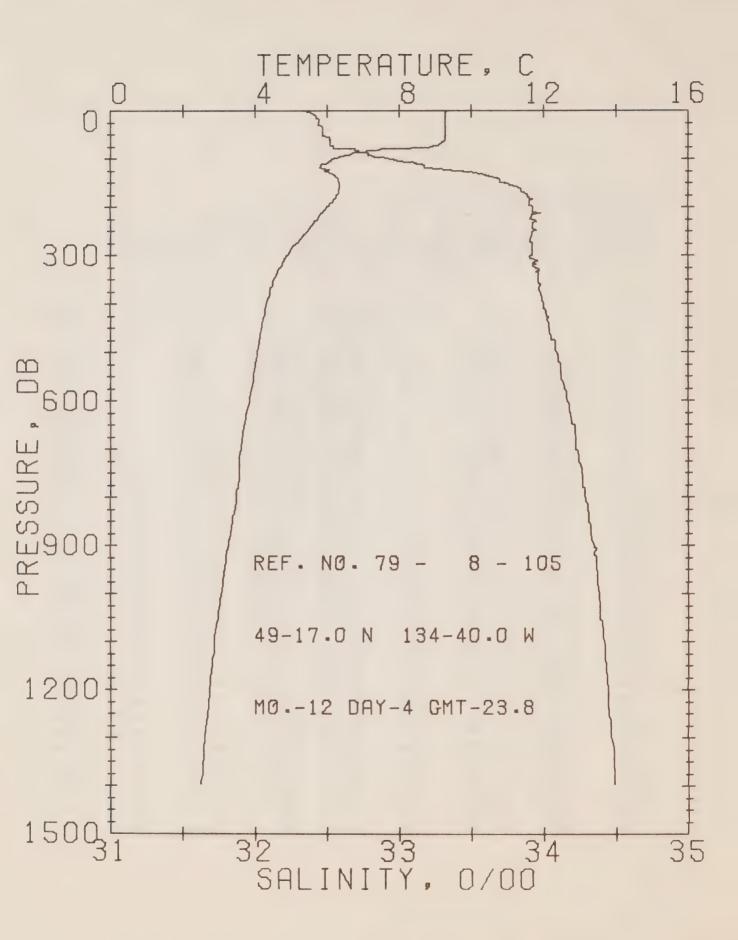
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-105 DATE 4/12/79

POSITION 49-17.0N. 134-40.0W GMT 23.8 STATION 8

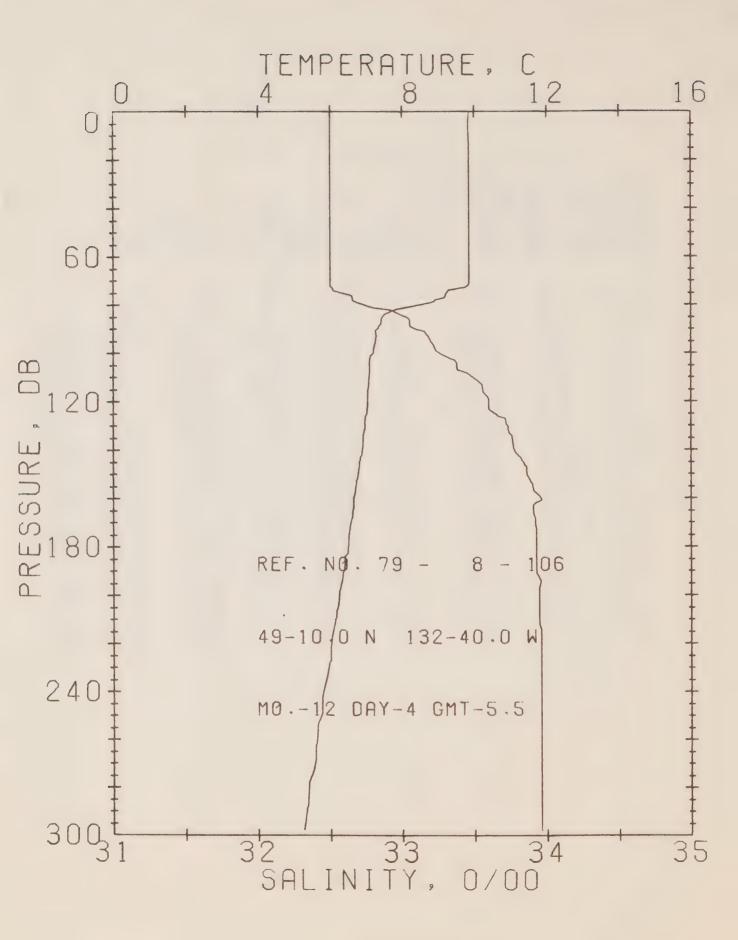
RESULTS OF STP CAST 174 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	9.30	32.34	0	T 25.01	295.3	• 0 0	EN	1484.
10	9.30	32.42	10	25.08	289.6	•29	.00 .01	1485.
20	9.29	32.45	20	25.10	287.3	•58	•06	1485.
30	9.29	32.44	30	25.09	288.2	•87	•13	1485.
40	9.29	32.47	40	25.12	286.2	1.16	.23	1485.
50	9.29	32.47	50	25.12	286.4	1.44	•23	1485.
60	9.28	32.51	60	25.15	283.4	1.73	•53	1486.
70	9.08	32.52	70	25.19	279.8	2.01	.71	1485.
80	7.43	32.69	80	25.57	243.9	2.27	.92	1479.
90	6.63	32.79	89	25.75	226.2	2.51	1.12	1476.
100	6.11	32.95	99	25.94	208.0	2.73	1.33	1474.
110	5.86	33.15	109	26.13	190.2	2.93	1.55	1474.
120	5.86	33.23	119	26.20	184.4	3.12	1.77	1474.
130	6.15	33.56	129	26.42	163.4	3.29	1.99	1476.
140	6.31	33.68	139	26.49	156.5	3.45	2.20	1477.
150	6.34	33.73	149	26.53	153.3	3.60	2.43	1477.
160	6.34	33.83	159	26.61	146.0	3.75	2.67	1478.
170	6.31	33.87	169	26.64	142.8	3.90	2.91	1478.
180	6.23	33.90	179	26.68	139.7	4.04	3.17	1477.
190	6.11	33.90	189	26.69	138.3	4.18	3.43	1477.
200	5.98	33.93	199	26.73	134.6	4.31	3.70	1477.
210	5'-87	33.93	209	26.75	133.4	4.45	3.98	1477.
220	5'.75	33.92	218	26.75	132.9	4.58	4.27	1476.
230	5.64	33.95	228	26.79	129.3	4.71	4.57	1476.
240	5.53	33.92	238	26.78	130.4	4.84	4.88	1476.
250	5.45	33.94	248	26.80	128.3	4.97	5.21	1476.
260	5.30	33.92	258	26.81	127.9	5.10	5.54	1475.
270	5.21	33.91	268	26.81	127.6	5.23	5.89	1475.
280	5.05	33.92	278	26.84	125.2	5.36	6.24	1474.
290	4.96	33.92	288	26.85	124.3	5.48	6.60	1474.
300	4.87	33.92	298	26.86	123.3	5.60	6.98	1474.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8-105 DATE 4/12/79
POSITION 49-17.0N, 134-40.0W GMT 23.8 STATION 8
RESULTS OF STP CAST 351 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	9.30	32.34	0	25.01	295.3	•00	•00	1484.
10	9.29	32.42	10	25.08	289.6	•29	.01	1485.
20	9.29	32.45	20	25.10	287.3	•58	.06	1485.
30	9.29	32.44	30	25.09	288.2	•87	•13	1485.
50	9.29	32.47	50	25.12	286.4	1.44	•37	1485.
75	8.78	32.54	75	25.25	274.0	2.15	•81	1484.
100	6.11	32.95	99	25.94	208.0	2.73	1.33	1474.
125	5.99	33.45	124	26.35	169.6	3.21	1.88	1475.
150	6.34	33.73	149	26.53	153.3	3.60	2.43	1477.
175	6.27	33.89	174	26.66	140.8	3.97	3.04	1478.
200	5.98	33.93	199	26.73	134.6	4.31	3.70	1477.
225	5.74	33.92	223	20.75	132.7	4.65	4.42	1476.
250	5.45	33.94	248	26.80	128.3	4.97	5.21	1476.
300	4.87	33.92	298	26.86	123.3	5.60	6.98	1474.
400	4.30	34.00	397	26.98	112.0	6.77	11.14	1473.
500	4.06	34.09	496	27.08	103.8	7.86	16.09	1474.
600	3.84	34.16	595	27.16	96.9	8.86	21.71	1475.
800	3.47	34.28	793	27.29	84.9	10.66	34.53	1477.
1000	3.04	34.38	990	27.41	74.6	12.24	49.02	1478.
1200	2.71	34.44	1188	27.49	67.7	13.66	64.89	1480.



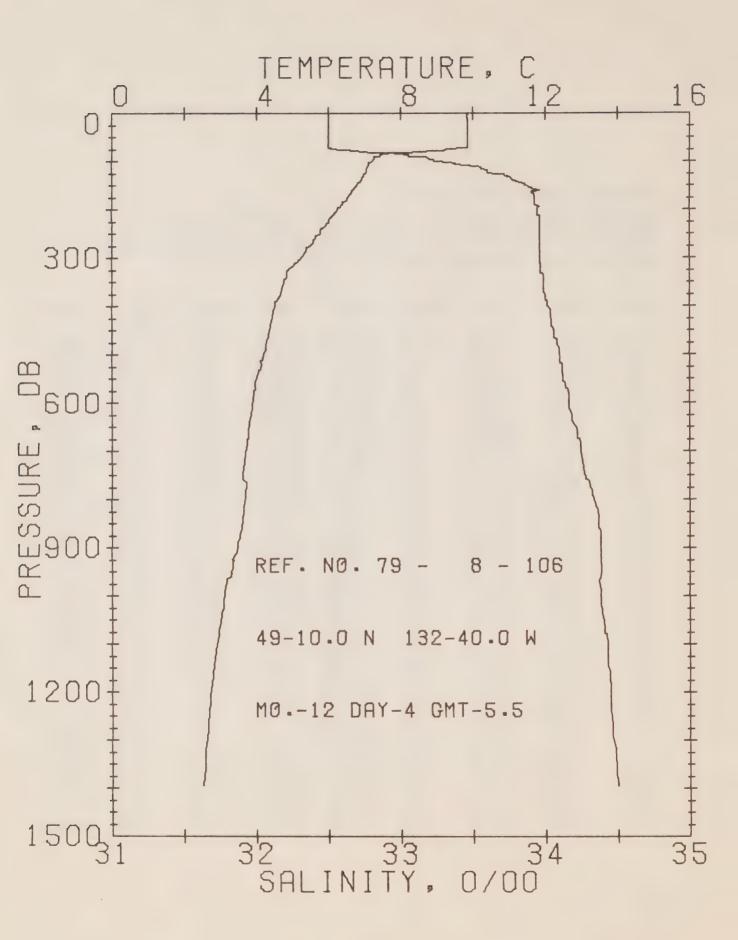
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-106 DATE 4/12/79

POSITION 49-10.0N, 132-40.0W GMT 5.5 STATION 7

RESULTS OF STP CAST 136 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
0	0.07	70 50	0	T 05 05	202	D	EN	4 4 0 00
0	9.87	32.50	0	25.05	292.2	•00	.00	1487.
10	9.85	32.50	10	25.05	292.1	•29	.01	1487.
20	9.86	32.50	20	25.05	292.5	•58	•06	1487.
30	9.87	32.50	30	25.05	292.8	•88	•13	1487.
40	9.87	32.50	40	25.05	292.9	1.17	.24	1487.
50	9.87	32.50	50	25.05	293.1	1.46	• 37	1488.
60	9.87	32.50	60	25.05	293.3	1.76	•54	1488.
70	9.87	32.50	70	25.05	293.4	2.05	•73	1488.
80	8.51	32.74	80	25.45	255.3	2.33	•94	1483.
90	7.30	33.09	89	25.90	212.6	2.55	1.14	1479.
100	7.20	33.20	99	26.05	198.7	2.76	1.34	1479.
110	7.07	33.50	109	26.25	179.6	2.95	1.54	1479.
120	7.03	33.60	119	26.34	171.5	3.12	1.74	1479.
130	6.96	33.73	129	26.45	161.0	3.29	1.96	1479.
140	6.89	33.78	139	26.49	156.8	3.45	2.17	1479.
150	6.78	33.86	149	26.57	149.3	3.60	2.40	1479.
160	6.64	33.97	159	26.68	139.4	3.74	2.63	1479.
170	6.57	33.92	169	26.65	142.4	3.89	2.87	1479.
180	6.50	33.93	179	26.67	140.8	4.03	3.12	1479.
190	6.37	33.93	189	26.68	139.3	4.17	3.38	1478.
200	6.24	33.95	199	26.72	136.3	4.30	3.66	1478.
210	6.13	33.95	209	26.73	135.1	4.44	3.94	1478.
220	6.01	33.96	218	26.75	133.0	4.57	4.23	1477.
230	5.94	33.96	228	26.76	132.2	4.71	4.54	1477.
240	5.79	33.96	238	26.78	130.5	4.84	4.85	1477.
250	5.74	33.96	248	26.79	130.0	4.97	5.18	1477.
260	5.61	33.96	258	26.80	128.5	5.10	5.51	1476.
270	5.55	33.96	268	26.81	128.0	5.23	5.86	1476.
280	5.39	33.96	278	26.83	126.2	5.35	6.22	1476.
290	5.33	33.96	288	26.84	125.6	5.48	6.58	1476.
300	5.24	33.96	298	26.85	124.6	5.60	6.96	1475.
000	0-27	00.70		2000	- C. 1 0 O	3 • 0 0	0.00	1110



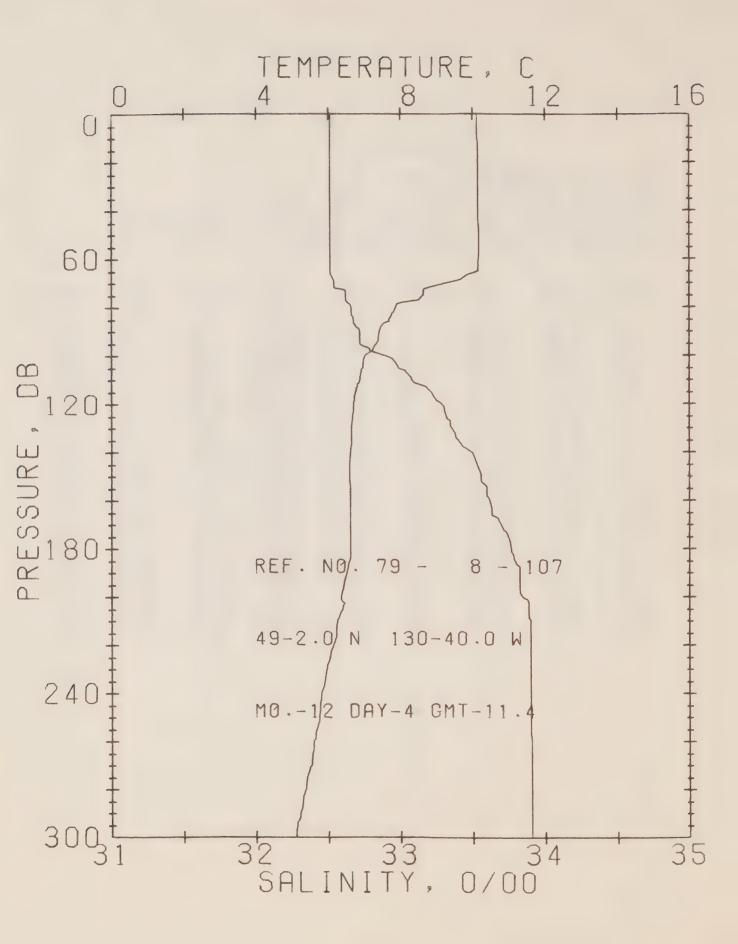
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-106 DATE 4/12/79

POSITION 49-10.0N, 132-40.0W GMT 5.5 STATION 7

RESULTS OF STP CAST 324 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
U	9.87	32.50	0	25.05	292.2	•00	•00	1487.
10	9'-85	32.50	10	25.05	292.1	•29	.01	1487.
20	9.86	32.50	20	25.05	292.5	•58	.06	1487.
30	9.87	32.50	30	25.05	292.8	•88	.13	1487.
50	9.87	32.50	50	25.05	293.1	1.46	• 37	1488.
75	9.22	32.59	75	25.22	276.9	2.19	.84	1486.
100	7.20	33.26	99	26.05	198.7	2.76	1.34	1479.
125	7.00	33.65	124	26.38	167.4	3.21	1.85	1479.
150	6.78	33.86	149	26.57	149.3	3.60	2.40	1479.
175	6.53	33.93	174	26.66	141.2	3.96	2.99	1479.
200	6.24	33.95	199	26.72	136.3	4.30	3.66	1478.
225	5.99	33.96	223	26.75	132.8	4.64	4.38	1477.
250	5.74	33.96	248	26.79	130.0	4.97	5.18	1477.
300	5.24	33.96	298	26.85	124.6	5.60	6.96	1475.
400	4.50	34.01	397	26.97	113.2	6.78	11.16	1474.
500	4.19	34.09	496	27.07	104.8	7.87	16.14	1475.
600	3.88	34.16	595	27.15	97.1	8.88	21.78	1475.
800	3.66	34.34	793	27.31	83.3	10.68	34.61	1478.
1000	3.08	34.38	990	27.41	75.0	12.25	48.97	1479.
1200	2.71	34.45	1188	27.49	66.9	13.66	64.79	1480.



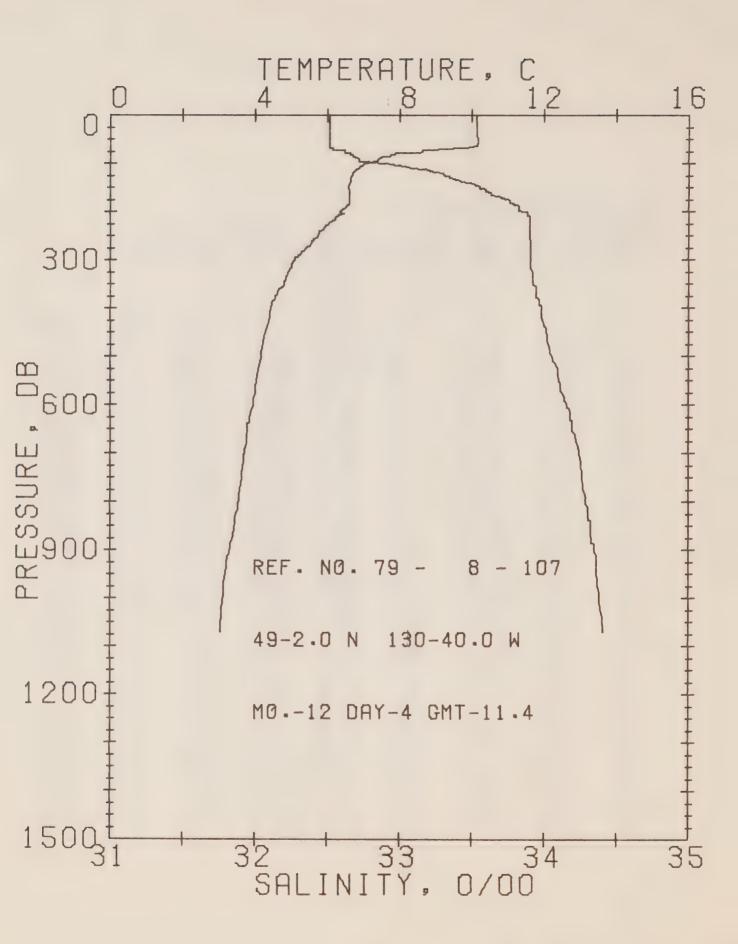
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-107 DATE 4/12/79

POSITION 49- 2.0N, 130-40.0W GMT 11.4 STATION 6

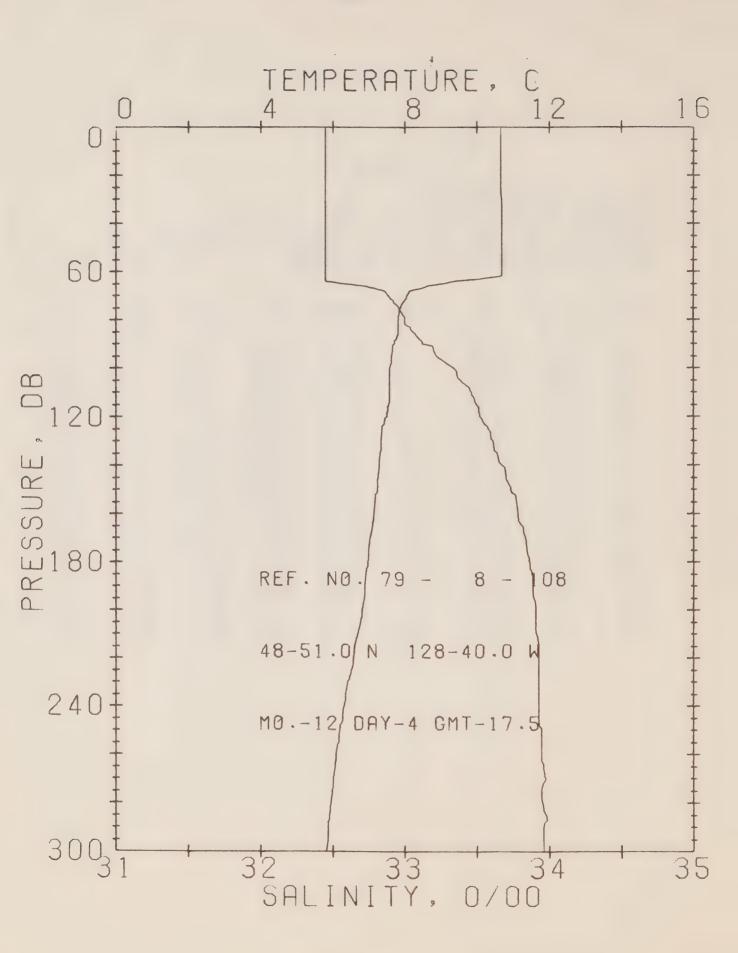
RESULTS OF STP CAST 156 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
0	10.14	32.51	0	25.01	295.7	•00	.00	1488.
10	10.14	32.51	10	25.01	296.0	•30	.02	1488.
20	10.16	32.51	20	25.01	296.4	•59	.06	1488.
30	10.16	32.51	30	25.01	296.6	.89	.14	1488.
40	10.17	32.51	40	25.00	297.0	1.19	.24	1488.
50	10.18	32.51	50	25.00	297.3	1.48	•38	1489.
60	10.17	32.51	60	25.01	297.3	1.78	•54	1489.
70	9.30	32.54	70	25.17	281.7	2.07	.74	1486.
80	7.86	32.66	80	25.48	252.0	2.34	.94	1481.
90	7.41	32.72	89	25.59	241.6	2.59	1.16	1479.
100	7.02	32.90	99	25.79	223.2	2.82	1.39	1478.
110	6.87	33.08	109	25.95	208.0	3.04	1.62	1478.
120	6.69	33.29	119	26.14	190.1	3.24	1.85	1478.
130	6.65	33.36	129	26.20	184.5	3.43	2.09	1478.
140	6.61	33.50	139	26.31	173.7	3.61	2.34	1478.
150	6.59	33.56	149	26.36	169.2	3.78	2.59	1478.
160	6.61	33.62	159	26.41	165.1	3.94	2.85	1478.
170	6.61	33.70	169	26.47	159.3	4.11	3.13	1479.
180	6.61	33.77	179	26.52	154.4	4.26	3.41	1479.
190	0.52	33.83	189	26.58	148.7	4.41	3.69	1479.
200	6.35	33.85	199	26.62	145.2	4.56	3.99	1478.
210	6.23	33.90	209	26.68	140.1	4.70	4.28	1478.
220	6.14	33.90	219	26.69	139.0	4.84	4.59	1478 •
230	5.96	33.90	228	26.71	137.0	4.98	4.90	1477.
240	5.79	33.90	238	26.73	135.0	5.12	5.23	1477.
250	5.73	33.90	248	26.74	134.4	5.25	5.57	1477. 1476.
260	5.57	33.91	258 268	26.77	131.8 131.3	5.39 5.52	5.91 6.27	1476.
270 280	5.52 5.36	33.91 33.91	278	26.77 26.79	129.5	5.65	6.63	1476.
290	5.21	33.91	288	26.81	127.9	5.78	7.01	1475.
300	5.09	33.91	298	26.82	126.6	5.90	7.39	1475.
300	3.09	22.91	270	20.02	120.0	3.70	1 • 37	1412.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8-107 DATE 4/12/79
POSITION 49- 2.0N, 130-40.0W GMT 11.4 STATION 6
RESULTS OF STP CAST 282 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
	4.0			T		D	EN	
0	10.14	32.51	. 0	25.01	295.7	• 0 0	• 0 0	1488.
10	10.14	32.51	10	25.01	296.0	• 30	•02	1488.
20	10.16	32.51	20	25.01	296.4	•59	• 06	1488.
30	10.16	32.51	30	25.01	296.6	•89	•14	1488.
50	10.18	32.51	50	25.00	297.3	1.48	•38	1489.
. 75	8.63	32.62	75	25.34	265.8	2.21	.84	1483.
100	7.02	32.90	99	25.79	223.2	2.82	1.39	1478.
125	6.68	33.32	124	26.16	187.8	3.33	1.97	1478.
150	6.59	33.56	149	26.36	169.2	3.78	2.59	1478.
175	6.61	33.74	174	26.51	156.0	4.19	3.27	1479.
200	6.35	33.85	199	26.62	145.2	4.56	3.99	1478.
225	6.03	33.90	223	26.70	137.8	4.91	4.75	1477.
250	5.73	33.90	248	26.74	134.4	5.25	5.57	1477.
300	5.09	33.91	298	26.82	126.6	5.90	7.39	1475.
400	4.43	33.98	397	26.95	114.9	7.12	11.71	1474.
500	4.15	34.05	496	27.04	107.6		16.82	1474.
600						8.23		
	3.94	34.15	595	27.14	98 • 4	9.26	22.57	1475.
800	3.53	34.29	793	27.29	85.2	11.08	35.49	1477.
1000	3.10	34.38	991	27.40	75.2	12.67	50.04	1479.



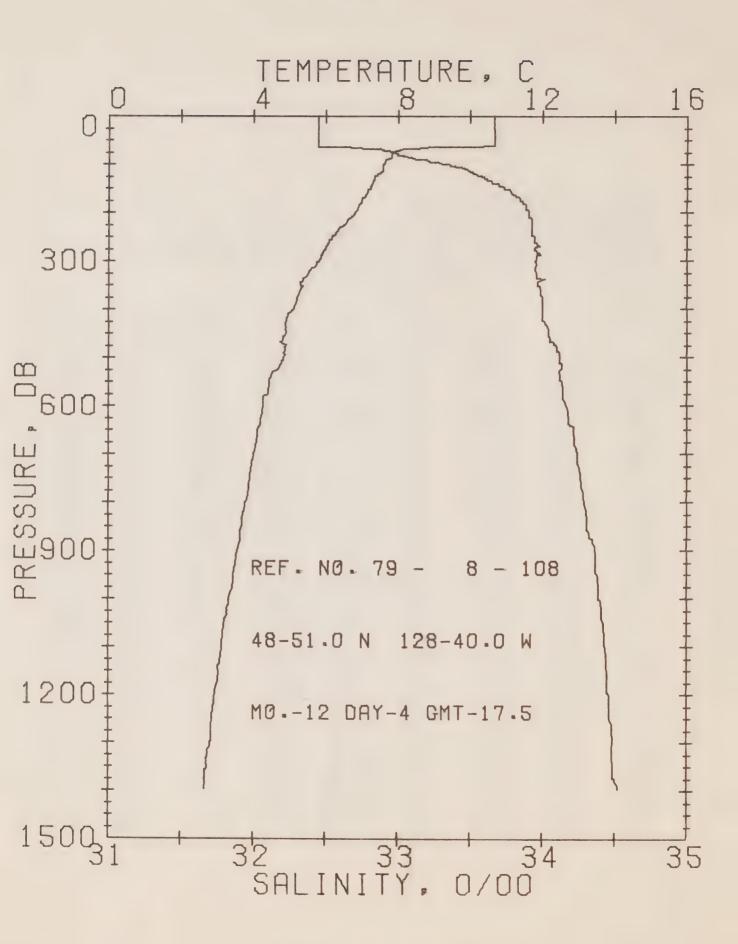
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-108 DATE 4/12/79

POSITION 48-51.0N, 128-40.0W GMT 17.5 STATION 5

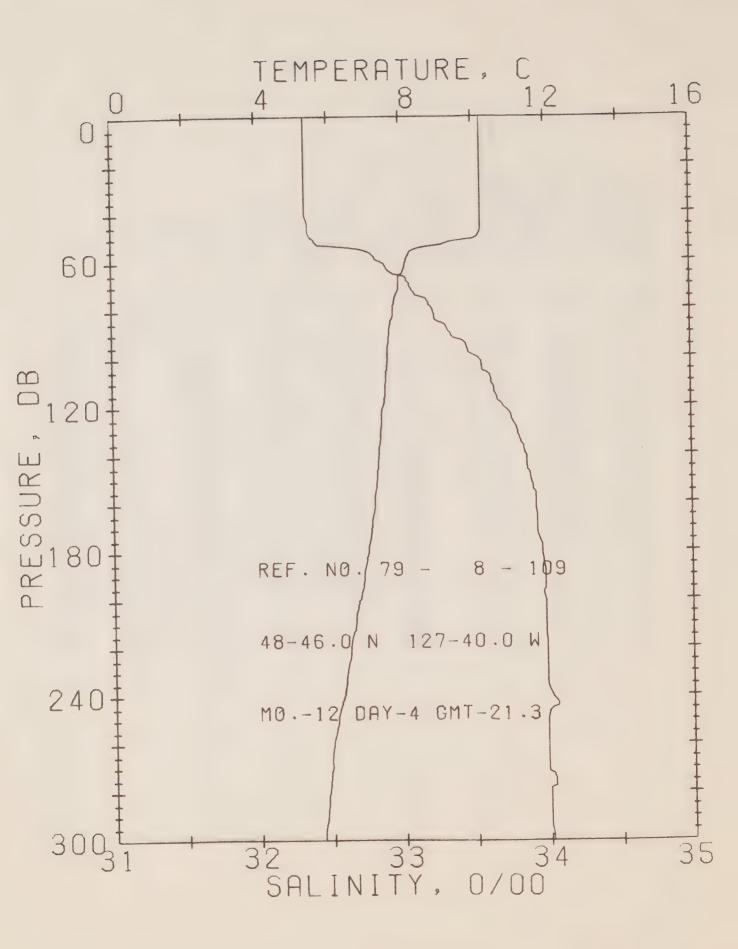
RESULTS OF STP CAST 159 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	10.67	32.45	0	24.87	308.8	•00	•00	1490.
10	10.68	32.45	10	24.87	309.1	•31	.02	1490.
20	10.68	32.45	20	24.87	309.3	•62	• 06	1490.
30	10.69	32.45	30	24.87	309.7	•93	.14	1490 •
40	10.69	32.45	40	24.87	309.9	1.24	• 25	1490.
50	10.69	32.45	50	24.87	310.2	1.55	• 39	1490.
60	10.70	32.45	60	24.87	310.4	1.86	•57	1491.
70	8.06	32.89	70	25.63	237.6	2.13	•75	1482.
08	7.82	33.00	80	25.75	226.2	2.36	•93	1481.
90	7.70	33.12	89	25.87	215.8	2.58	1.12	1481.
100	7.57	33.34	99	26.06	197.8	2.79	1.32	1481.
110	7.57	33.46	109	26.15	189.0	2.98	1.53	1481.
120	7.48	33.52	119	26.21	183.5	3.17	1.74	1481.
130	7.34	33.61	129	26.30	175.0	3.35	1.97	1481.
140	7.29	33.67	139	26.35	170.0	3.52	2.21	1481.
150	7.23	33.73	149	26.41	164.9	3.69	2.46	1481.
160	7.13	33.78	159	26.47	159.7	3.85	2.71	1481.
170	7.03	33.84	169	26.52	154.8	4.01	2.97	1480.
180	6.96	33.87	179	26.56	151.4	4.16	3.25	1480.
190	6.89	33.89	189	26.58	149.1	4.31	3.53	1480.
200	6.80	33.91	199	26.61	146.6	4.46	3.83	1480.
210	6.68	33.91	209	26.63	144.7	4.61	4.13	1480.
220	6.57	33.93	219	26.66	142.4	4.75	4.44	1480.
230	6.41	33.93	228	26.68	140.4	4.89	4.77	1479.
240	6.31	33.93	238	26.69	139.2	5.03	5.10	1479.
250	6.19	33.95	248	26.72	136.4	5.17	5.45	1479.
260	6.08	33.95	258	26.74	135.1	5.30	5.80	1478.
270	6.01	33.98	268	26.77	132.1	5.44	6.16	1478.
280	5,95	33.95	278	26.75	133.5	5.57	6.54	1478.
290	5.87	33.96	288	26.77	132.1	5.70	6.92	1478.
300	5.80	33.96	298	26.78	131.4	5.84	7.32	1478.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8-108 DATE 4/12/79
POSITION 48-51.0N, 128-40.0W GMT 17.5 STATION 5
RESULTS OF STP CAST 381 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
	101.0	60 da a 247		T	***	D	EN	
0	10.67	32.45	0	24.87	308.8	• 0 0	• 00	1490.
10	10.68	32.45	10	24.87	309.1	•31	•02	1490.
20	10.68	32.45	20	24.87	309.3	•62	.06	1490.
30	10.69	32.45	30	24.87	309.7	•93	.14	1490.
50	10.69	32.45	50	24.87	310.2	1.55	.39	1490.
75	7'-88	32.96	75	25.71	229.9	2.25	.84	1481.
100	7.57	33.34	99	26.06	197.8	2.79	1.32	1481.
125	7.36	33.58	124	26.27	177.5	3.26	1.86	1481.
150	7'.23	33.73	149	26.41	164.9	3.69	2.46	1481.
175	7.00	33.85	174	26.53	153.4	4.08	3.11	1480.
200	6.80	33.91	199	26.61	146.6	4.46	3.83	1480.
225	6.52	33.93	223	26.66	141.8	4.82	4.61	1479.
250	6.19	33.95	248	26.72	136.4	5.17	5.45	1479.
300	5.80	33.96	298	26.78	131.4	5.84	7.32	1478.
400	5.09	34.00	397	26.90	121.0	7.09	11.78	1477.
500	4.84	34.12	496	27.02	110.3	8.25	17.08	1477.
		34.16	595	27.11	101.7			1477.
600	4.26					9.30	23.00	
800	3.76	34.29	793	27.27	87.8	11.19	36.41	1478.
1000	3.30	34.39	991	27.39	76.7	12.83	51.39	1479.
1200	2.92	34.46	1188	27.48	68.7	14.27	67.57	1481.



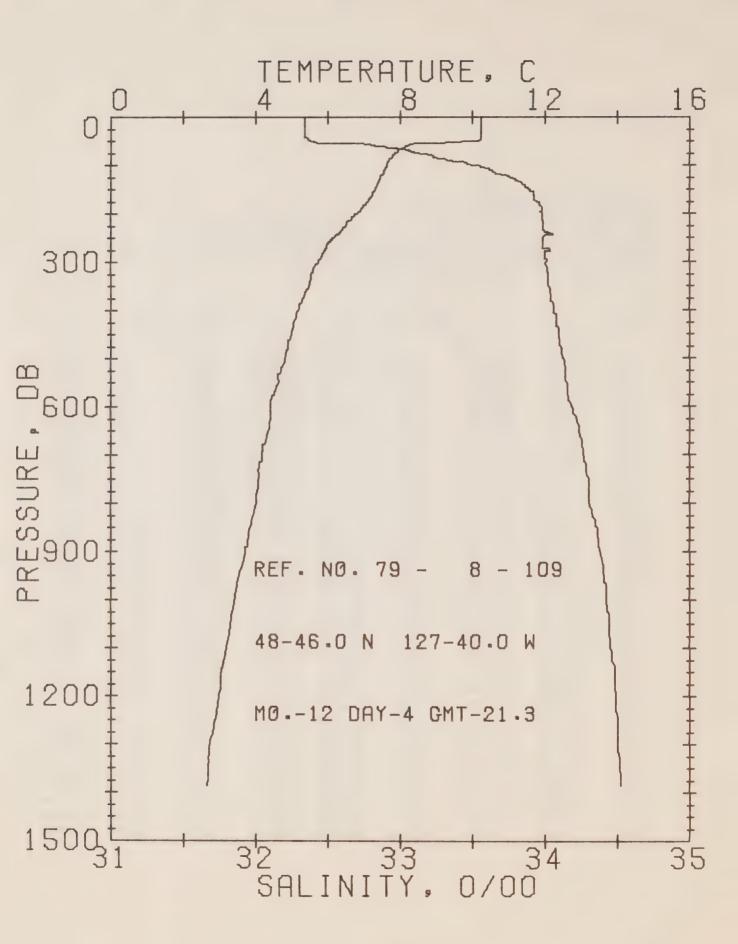
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-109 DATE 4/12/79

POSITION 48-46.0N, 127-40,0W GMT 21.3 STATION 4

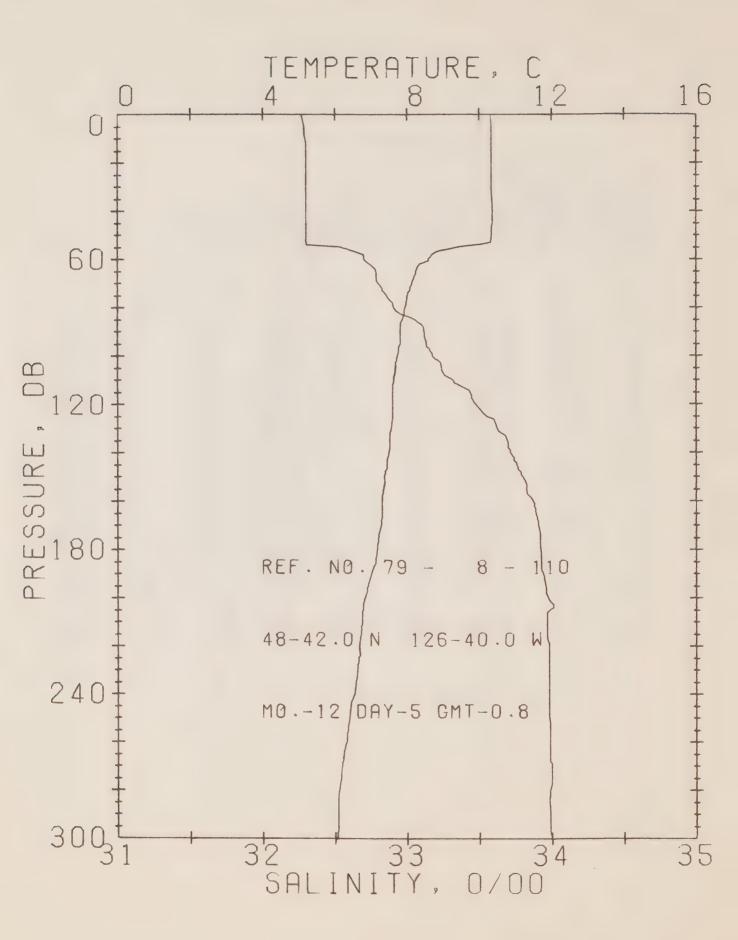
RESULTS OF STP CAST 175 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	10.25	32.34	0	24.86	310.1	•00	• 0 0	1488.
10	10.25	32.34	10	24.86	310.3	•31	•02	1488.
20	10.24	32.34	20	24.86	310.3	•62	•06	1488.
30	10.25	32.34	30	24.86	310.6	•93	.14	1488.
40	10.24	32.34	40	24.86	310.7	1.24	• 25	1489.
50	10.14	32.38	50	24.91	306.3	1.55	•40	1488.
60	8.15	32.86	60	25.60	240.9	1.82	•54	1482.
70	7.95	33.06	70	25.78	223.4	2.05	.70	1481.
80	7.79	33.22	80	25.93	209.6	2.26	•86	1481.
90	7.69	33.35	89	26.05	198.5	2.47	1.04	1481.
100	7.62	33.53	99	26.20	184.4	2.66	1.22	1481.
110	7.56	33.62	109	26.28	177.0	2.84	1.42	1481.
120	7.48	33.70	119	26.35	170.1	3.02	1.62	1481.
130	7.42	33.80	129	26.44	162.0	3.18	1.83	1481.
140	7.35	33.80	139	26.49	156.8	3.34	2.05	1481.
150	7.30	33.89	149	26.53	154.0	3.50	2.28	1481.
160	7.22	33.92	159	26.56	150.9	3.65	2.52	1481.
170	7.15	33.93	169	26.58	149.3	3.80	2.77	1481.
180	7.05	33.96	179	26.62	145.8	3.95	3.04	1481.
190	6.91	33.98	189	26.65	142.7	4.09	3.31	1480.
200	6.79	33.98	199	26.67	141.2	4.23	3.59	1480.
210	6.66	33.98	209	26.68	139.7	4.37	3.88	1480.
220	6.51	33.99	218	26.71	137.1	4.51	4.19	1479.
230	6.40	33.99	228	26.73	135.9	4.65	4.50	1479.
240	6.31	34.02	238	26.76	132.6	4.78	4.82	1479.
250	6.14	33.99	248	26.76	132.7	4.91	5.15	1478.
260	6.00	33.99	258	26.78	131.1	5.04	5.50	1478.
270	5.97	33.99	268	26.78	130.9	5.18	5.85	1478.
280	5.88	34.00	278	26.80	129.1	5.30	6.21	1478.
290	5.81	34.00	288	26.81	128.4	5.43	6.58	1478.
300	5.72	34.01	298	26.83	126.7	5.56	6.97	1478.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8-109 DATE 4/12/79
POSITION 48-46.0N, 127-40.0W GMT 21.3 STATION 4
RESULTS OF STP CAST 361 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT. EN	SOUND
0	10.25	32.34	0	24.86	310.1	•00	.00	1488.
10	10.25	32.34	10	24.86	310.3	•31	.02	1488.
20	10.24	32.34	20	24.86	310.3	.62	.06	1488.
30	10.25	32.34	30	24.86	310.6	•93	.14	1488.
50	10.14	32.38	50	24.91	306.3	1.55	•40	1488.
75	7.84	33.17	75	25.88	213.8	2.16	•78	1481.
100	7.62	33.53	99	26.20	184.4	2.66	1.22	1481.
125	7.44	33.76	124	26.40	165.2	3.10	1.73	1481.
150	7.30	33.89	149	26.53	154.0	3.50	2.28	1481.
175	7.08	33.95	174	26.60	147.0	3.87	2.90	1481.
200	6.79	33.98	199	26.67	141.2	4.23	3.59	1480.
225	6.48	33.99	223	26.72	136.8	4.58	4.34	1479.
250	6.14	33.99	248	26.76	132.7	4.91	5.15	1478.
300	5.72	34.01	298	26.83	126.7	5.56	6.97	1478.
400	5.17	34.06	397	26.93	117.4	6.78	11.32	1477.
500	4.81	34.12	496	27.02	109.8	7.92	16.52	1477.
600	4.41	34.18	595	27.11	101.5	8.97	22.44	1477.
800	3.98	34.30	793	27.26	89.4	10.86	35.82	1479.
1000	3.40	34.42	991	27.41	75.5	12.48	50.70	1480.
1200	2.96	34.49	1188	27.50	66.7	13.90	66.59	1481.



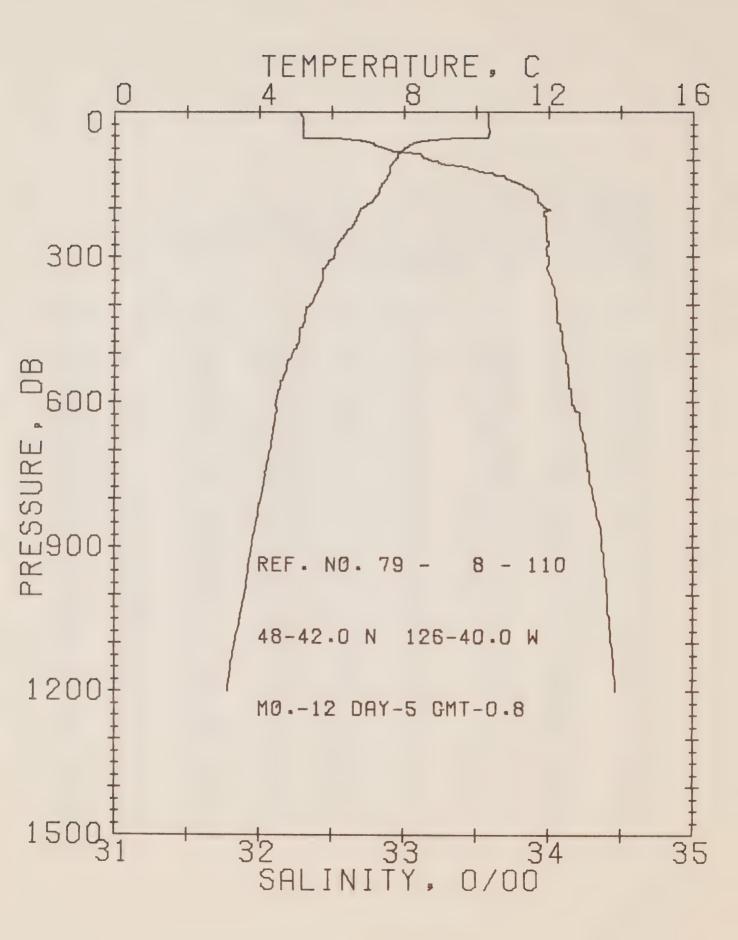
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-110 DATE 5/12/79

POSITION 48-42.0N, 126-40,0W GMT .8 STATION 3

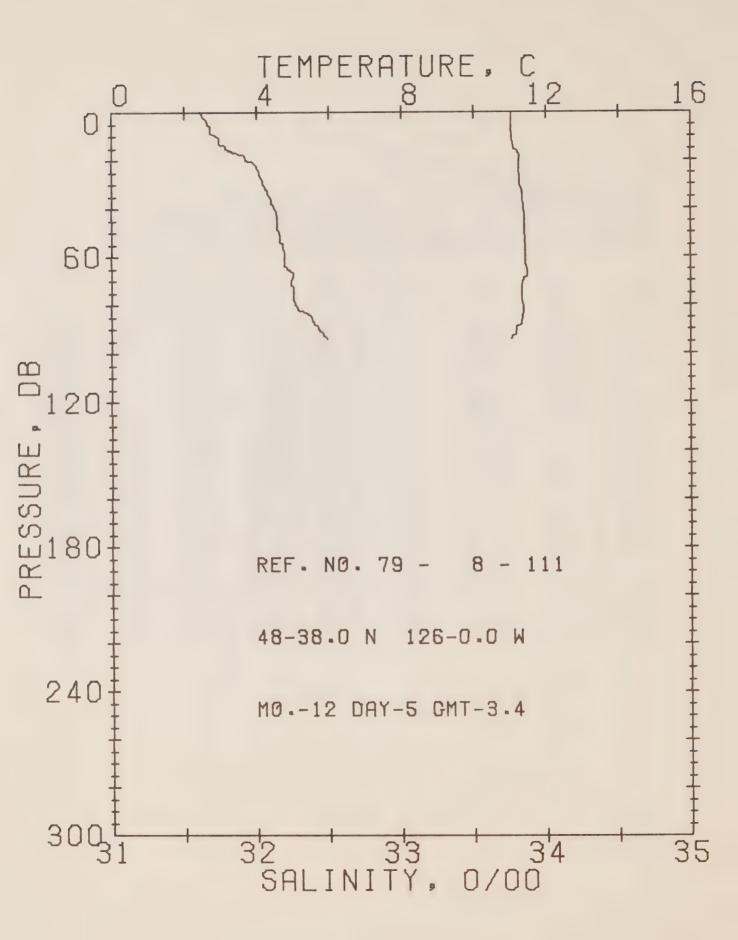
RESULTS OF STP CAST 176 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	· EN	
0	10.33	32.27	0	24.79	316.5	•00	.00	1488.
10	10.35	32.30	10	24.81	315.2	•32	.02	1488.
20	10.36	32.30	20	24.81	315.1	•63	•06	1489.
30	10.36	32.30	30	24.81	315.4	•95	.14	1489.
40	10.37	32.30	40	24.81	315.7	1.26	•26	1489.
50	10.35	32.30	50	24.81	315.6	1.58	.40	1489.
60	8.59	32.70	60	25.41	259.1	1.87	•56	1483.
70	8.14	32.80	70	25.55	245.4	2.12	•73	1482.
80	7.96	32.91	80	25.66	234.8	2.36	•91	1481.
90	7.81	33.12	89	25.85	217.3	2.58	1.11	1481.
100	7.73	33.17	99	25.90	212.6	2.80	1.32	1481.
110	7.63	33.32	109	26.03	200.3	3.00	1.54	1481.
120	7.59	33.47	119	26.16	188.3	3.20	1.76	1481.
130	7.56	33.62	129	26.28	176.9	3.38	1.99	1482.
140	7.49	33.71	139	26.36	169.8	3.55	2.23	1482.
150	7.37	33.80	149	26.45	161.6	3.72	2.48	1481.
160	7.31	33.87	159	26.51	155.7	3.87	2.73	1481.
170	7.27	33.91	169	26.55	152.4	4.03	2.99	1481.
180	7.16	33.92	179	26.57	150.0	4.18	3.26	1481.
190	7.00	33.94	189	26.61	146.6	4.33	3.54	1481.
200	6.83	33.97	199	26.66	142.1	4.47	3.82	1480.
210	6.74	33.97	209	26.67	141.5	4.61	4.12	1480.
220	6.68	33.98	219	26.68	140.1	4.75	4.43	1480.
230	6.61	33.98	228	26.69	139.3	4.89	4.75	1480.
240	6.54	33.98	238	26.70	138.5	5.03	5.08	1480.
250	6.38	33.98	248	26.72	136.4	5.17	5.42	1479.
260	6.32	33.99	258	26.74	135.2	5.31	5.78	1479.
270	6.18	34.00	268	26.76	132.8	5.44	6.14	1479.
280	6.11	33.99	278	26.76	132.8	5.57	6.51	1479.
290	6.07	33.99	288	26.77	132.4	5.71	6.90	1479.
300	6.04	34.00	298	26.78	131.4	5.84	7.29	1479.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8-110 DATE 5/12/79
POSITION 48-42.0N, 126-40.0W GMT .8 STATION 3
RESULTS OF STP CAST 359 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA T	SVA	DELTA	POT.	SOUND
0	10.33	32.27	0	24.79	316.5	•00	•00	1488.
10	10.35	32.30	10	24.81	315.2	•32	.02	1488.
20	10.36	32.30	20	24.81	315.1	•63	.06	1489.
30	10.36	32.30	30	24.81	315.4	•95	.14	1489.
50	10.35	32.30	50	24.81	315.6	1.58	.40	1489.
75	8.01	32.86	75	25.62	239.2	2.24	.82	1481.
100	7.73	33.17	99	25.90	212.6	2.80	1.32	1481.
125	7.59	33.55	124	26.22	182.8	3.29	1.88	1481.
150	7.37	33.80	149	26.45	161.6	3.72	2.48	1481.
175	7.20	33.92	174	26.56	150.8	4.10	3.12	1481.
200	6.83	33.97	199	26.66	142.1	4.47	3.82	1480.
225	6.65	33.98	223	26.69	139.7	4.82	4.59	1480.
250	6.38	33.98	248	26.72	136.4	5.17	5.42	1479.
300	6.04	34.00	298	26.78	131.4	5.84	7.29	1479.
400	5.39	34.05	397	26.90	120.9	7.10	11.79	1478.
500	4.91	34.11	496	27.00	111.7	8.27	17.13	1478.
600	4.45	34.16	595	27.09	103.6	9.34	23.14	1477.
800	4.03	34.31	<b>7</b> 93	27.26	89.4	11.26	36.79	1479.
1000	3.58	34.41	991	27.38	78.7	12.92	52.01	1481.
1200	3.12	34.46	1188	27.47	70.8	14.41	68.66	1482.



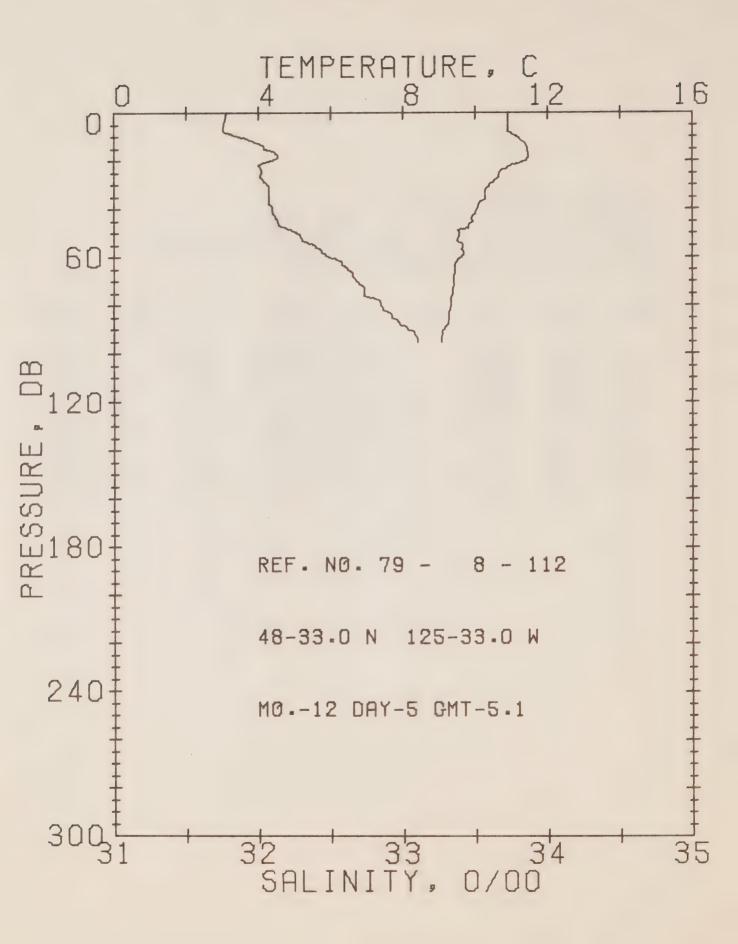
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 8-111 DATE 5/12/79

POSITION 48-38.0N, 126- ,0W GMT 3.4 STATION 2

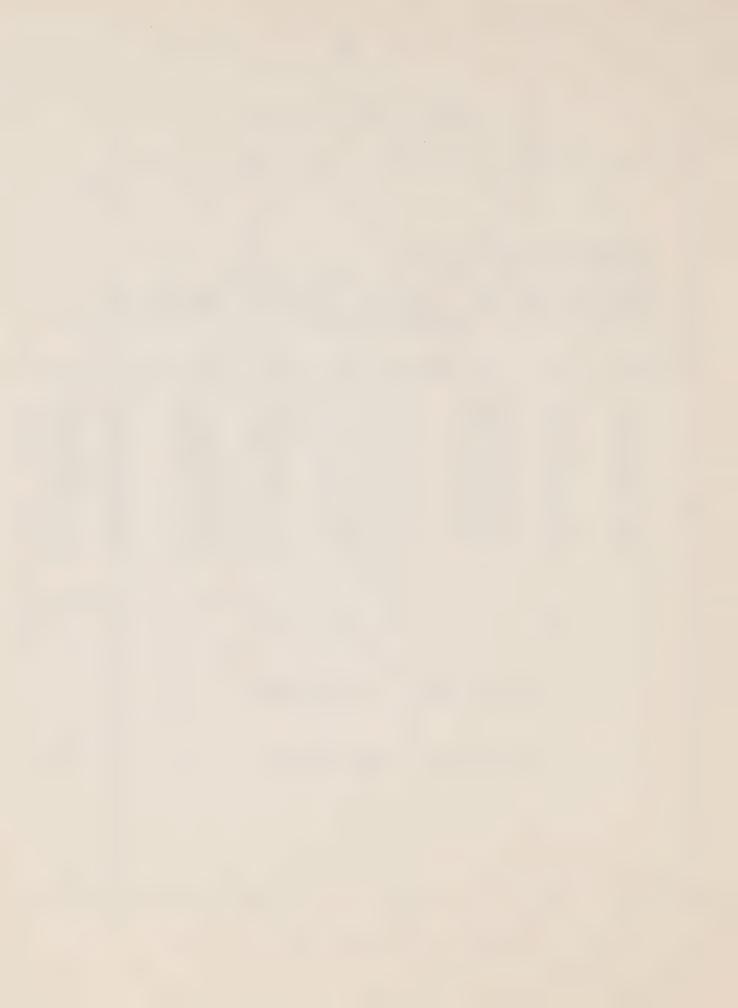
RESULTS OF STP CAST 71 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				T		D	EN	
0	11.04	31.61	0	24.16	376.9	•00	•00	1490.
10	11.06	31.72	10	24.24	369.4	• 37	.02	1490.
20	11.25	31.92	20	24.36	358.0	•74	.07	1491.
30	11.29	32.04	30	24.45	350.0	1.09	.16	1492.
40	11.40	32.12	40	24.49	346.2	1.44	•29	1492.
50	11.42	32.15	50	24.51	344.5	1.78	•45	1493.
60	11.43	32.19	60	24.54	342.0	2.13	.64	1493.
70	11.36	32.24	70	24.59	337.3	2.47	.86	1493.
80	11.38	32.27	80	24.61	335.6	2.80	1.12	1493.
90	11.20	32.43	90	24.76	321.0	3.13	1.41	1493.



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 8-112 DATE 5/12/79
POSITION 48-33.0N, 125-33.0W GMT 5.1 STATION 1
RESULTS OF STP CAST 82 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP	SAL	DEPTH	SIGMA	SVA	DELTA	POT.	SOUND
				Т		D	EN	
0	10.90	31.78	0	24.31	362.1	•00	.00	1490.
10	11.14	31.86	10	24.33	360.4	• 36	•02	1491.
20	11.42	32.10	20	24.47	347.6	•71	•07	1492.
30	10.41	32.06	30	24.61	333.9	1.06	•16	1489.
40	10.05	32.09	40	24.70	326.1	1.39	•28	1487.
50	9,58	32.27	50	24.92	305.6	1.71	•42	1486.
60	9.64	32.49	60	25.08	290.4	2.01	•59	1487.
70	9.42	32.68	70	25.26	273.2	2.28	.78	1486.
80	9.33	32.85	80	25.41	259.4	2.55	•98	1486.
90	9.15	33.03	90	25.58	243.5	2.80	1.20	1486.



Surface Salinity and Temperature Observations (P-79-8)

# SURFACE SALINITY AND TEMPERATURE OBSERVATIONS CRUISE REFERENCE NUMBER 79- 8

DATE/TIME	SALINITY	TEMP	LONGITUDE
YR MO DY GMT	0/00	С	WEST
79 10 19 1820	31.104	11.4	123-30
79 10 19 1900	31.329	11.1	124- 0
79 10 19 1935	31.457	11.6	124-30
79 10 19 2015	31.387	11.3	125- 0
79 10 19 2355	32.309	11.1	125-33
79 10 20 115	31.961	12.6	126- 0
79 10 20 315	32.130	13.8	126-40
79 10 20 635	32.104	14.0	127-40
79 10 20 1020	32.026	14.2	128-40
79 10 20 1405	32.361	15.3	129-40
79 10 20 1650	32.435	15 • 1	130-40
79 10 20 2145	32.435	14.6	131-40
79 10 21 50	32.384	14.7	132-40
79 10 21 420	32.352	13.6	133-40
79 10 21 655	32.364	13.3	134-40
79 10 21 1030	32.409	13.4	135-40
79 10 21 1315	32.456	13.1	136-40
79 10 21 1605	32.443	13.0	137-40
79 10 21 1850	32.441	12.7	138-40
79 10 21 2115	32.412	12.4	139-40
79 10 22 0	32.428	12.1	140-40
79 10 22 230 79 10 22 2240	32.431	11.7	141-40
79 10 22 2240 79 10 23 0	32.495	11.1	143-40
79 10 23 0	32.514	10.8	145- 0
79 10 25 0	32.550 32.567	10.3 10.2	ON STATION
79 10 26 0	32.565	10.0	ON STATION
79 10 27 0	32.585	10.2	ON STATION
79 10 28 0	32.580	9.8	ON STATION
79 10 29 0	32.572	9.8	ON STATION
79 10 30 0	32.559	9.8	ON STATION
79 10 31 0	32.555	9.7	ON STATION
79 11 1 0	32.562	9.3	ON STATION
79 11 2 0	32.572	9.3	ON STATION
79 11 3 0	32.569	9.8	ON STATION
79 11 4 0	32.563	9.7	ON STATION
79 11 5 0	32.547	9.7	ON STATION
79 11 6 0	32.553	9.7	ON STATION
79 11 7 0	32.562	9.6	ON STATION
79 11 8 0	32.552	9.0	ON STATION
79 11 9 0	32.564	9.6	ON STATION
79 11 10 0	32.557	9.6	ON STATION
79 11 11 0	32.565	9.5	ON STATION
79 11 12 0	32.544	9.5	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS CRUISE REFERENCE NUMBER 79- 8

DATE/TIME         SALINITY         TEMP         LONGITUDE           YR MO DY GMT         0/00         C         WEST           79 11 13         0         32.552         9.4         ON STATION           79 11 14         0         32.532         9.4         ON STATION           79 11 15         0         32.567         9.4         ON STATION           79 11 16         0         32.566         9.4         ON STATION           79 11 17         0         32.594         9.4         ON STATION           79 11 18         0         32.565         9.2         ON STATION           79 11 19         0         32.558         9.1         ON STATION
79 11 13 0 32.552 9.4 ON STATION 79 11 14 0 32.532 9.4 ON STATION 79 11 15 0 32.567 9.4 ON STATION 79 11 16 0 32.566 9.4 ON STATION 79 11 17 0 32.594 9.4 ON STATION 79 11 18 0 32.565 9.2 ON STATION 79 11 18 0 32.565 9.2 ON STATION
79 11 14 0 32.532 9.4 ON STATION 79 11 15 0 32.567 9.4 ON STATION 79 11 16 0 32.566 9.4 ON STATION 79 11 17 0 32.594 9.4 ON STATION 79 11 18 0 32.565 9.2 ON STATION
79 11 15 0 32.567 9.4 ON STATION 79 11 16 U 32.566 9.4 ON STATION 79 11 17 0 32.594 9.4 ON STATION 79 11 18 0 32.565 9.2 ON STATION
79 11 16 U 32.566 9.4 ON STATION 79 11 17 0 32.594 9.4 ON STATION 79 11 18 0 32.565 9.2 ON STATION
79 11 17 0 32.594 9.4 ON STATION 79 11 18 0 32.565 9.2 ON STATION
79 11 18 0 32.565 9.2 ON STATION
V) II I) O DE OSO JUI ON STATION
79 11 20 0 32.577 9.1 ON STATION
79 11 21 0 32.593 8.9 ON STATION
79 11 22 0 32.587 8.8 ON STATION
79 11 23 0 32.600 8.6 ON STATION
79 11 24 0 32.591 8.7 ON STATION
79 11 25 0 32.590 8.6 ON STATION
79 11 26 0 32.591 8.5 ON STATION
79 11 27 0 32.569 8.5 ON STATION
79 11 28 0 32.557 8.2 ON STATION
79 11 29 0 32.587 8.2 ON STATION
79 11 30 0 32.609 8.1 ON STATION
79 12 1 0 32.595 8.1 ON STATION
79 12 2 0 32.597 8.0 145-0
79 12 2 920 32.556 8.1 143-40
79 12 2 1720 32.518 8.1 142-40
79 12 3 210 32.484 8.2 141-40
79 12 3 620 32.501 8.0 140-40
79 12 3 930 32.474 8.5 139-40
79 12 3 1245 32.502 8.6 138-40
79 12 3 1500 32.498 8.6 137-40
79 12 3 1755 32.460 8.9 136-40
79 12 3 2105 32.478 9.3 135-40
79 12 3 2350 32.503 9.4 134-40
79 12 4 250 32.491 9.4 133-40
79 12 4 525 32.479 9.9 132-40
79 12 4 840 32.464 10.0 131-40
79 12 4 1125 32.494 10.2 130-40
79 12 4 1430 32.372 10.5 129-40
79 12 4 1730 32.446 10.7 128-40
79 12 4 2100 32.360 10.2 127-40
79 12 5 45 32.289 10.3 126-40
79 12 5 325 31.838 11.0 126-0
79 12 5 505 31.707 10.8 125-33
79 12 5 755 31.123 11.5 125-0
79 12 5 950 29.320 9.8 124-30
79 12 5 1145 31.078 9.6 124-0
79 12 5 1455 31.848 8.6 123-30

<sup>\*</sup> DENOTES SALINITY SAMPLE TAKEN FROM A BUCKET. ALL OTHER SAMPLES TAKEN FROM THE SEAWATER LOOP







# OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P 30 November 1979 - 17 January 1980 VOLUME 105



Sidney, B.C.

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V8L 4B2

Pacific Marine Science Report 81-19

# OCEANOGRAPHIC OBSERVATIONS AT OCEAN STATION P 30 November 1979 - 17 January 1980 VOLUME 105

Institute of Ocean Sciences
Sidney, B.C.
1981



# ABSTRACT

Physical, chemical and biological oceanographic observations are made from the weathership at Ocean Weather Station Papa, and between Esquimalt and Station Papa, on a routine continuing basis. Physical oceanography data only are shown, including surface observations and profiles obtained with bottle casts and conductivity-temperature-pressure instruments.



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#### INTRODUCTION

Canadian operation of Ocean Weather Station P (Latitude 50°00'N, Longitude 145°00'W) was inaugurated in December 1950. The station is occupied primarily to make meteorological observations of the surface and upper air and to provide an air-sea rescue service. The station is manned by two vessels operated by the Marine Services Branch of the Ministry of Transport. They are the CCGS Vancouver and the CCGS Quadra. Each ship remains on station for a period of six weeks, and is then relieved by the alternate ship, thus maintaining a continuous watch.

Bathythermograph observations have been made at Station P since July 1952. A program of more extensive oceanographic observations commenced in August 1956. This was extended in April 1959 by the addition of a series of oceanographic stations along the route to and from Station P and Swiftsure Bank. These stations are known as Line P stations. The number of stations on Line P has been increased twice and now consists of twelve stations (Fig. 1). Bathythermograph observations and surface salinity sample collections, in addition to being made on Line P oceanographic stations, are also made at odd meridians at 40', i.e. 139 40'W, 141 40'W, etc. These stations are known as Line P BT stations. Data observed prior to 1968 have been indexed by Collins et al (1969).

The present record includes STD and surface salinity and temperature data collected from the CCGS Vancouver during the period 30 November 1979 to 17 January 1980.

All physical oceanographic data have been stored by the Marine Environmental Data Services Branch (MEDS), Department of Fisheries and Oceans, 240 Sparks Street, 7th Floor West, Ottawa, Ontario, Canada, K1A OE6. Requests for these data should be directed to MEDS.

Biological and productivity data are published in the Manuscript Report series of the Department of Fisheries and Oceans (DFO), Pacific Biological Station, Nanaimo, British Columbia, Canada. Requests for these data should be directed to DFO.

Marine geochemical data are for the Ocean Chemistry Division, Department of Fisheries and Oceans, Institute of Ocean Sciences, P.O. Box 6000, Sidney, B. C., Canada, V&L 4B2.

# PROGRAM OF OBSERVATION FROM CCGS VANCOUVER, 30 November, 1979 - 17 January, 1980 (P-79-9) (MEDS Ref. No. 15-79-009)

Oceanographic observations were made by the officers and crew of the CCGS Vancouver.

# En Route to Station P (Line P)

Surface salinity and nutrient samples were taken from the seawater loop or bucket.

The surface temperature recorder (engine intake) and thermosalinograph (seawater loop) were run continuously.

XBT's were taken at all stations.

# On Station P

The oceanographic program was carried out as follows:

#### Physical Oceanography

- 1. 63 STD profiles were taken at Station P 10 STD profiles were taken at MILE GRID positions.
- 2. Daily salinity samples were taken from the seawater loop.
- 3. The regular 3-hourly BT observations were deleted during this cruise. The temperature profile only of all STD's taken at Station P were digitized and transmitted according to the IGOSS format.

#### Marine Geochemistry

Samples for Air,  $\mathrm{CO}_2$ ,  $\mathrm{PCO}_2$ ,  $\mathrm{POC}_3$ , alkalinity, nutrients and tritium obtained during this cruise are for the Ocean Chemistry Division and are not included in this data report.

# Biological Oceanography

Samples from 150 metre vertical plankton hauls (Station P) and nutrients (Line P) obtained during this cruise are for the Pacific Biological Station and are not included in this data report.

#### En Route from Station P (line P)

STD profiles were taken at Line P stations 12 and 9 to 1.

Surface salinity and nutrient samples were taken from the seawaterloop or bucket.

The surface temperature recorder (engine intake) and thermosalinograph

(seawater loop) were run continuously.

XBT's were taken at stations  $11\frac{1}{2}$ , 11,  $10\frac{1}{2}$ , 10,  $9\frac{1}{2}$ ,  $8\frac{1}{2}$ ,  $7\frac{1}{2}$ , and  $6\frac{1}{2}$ .

# Observations for Other Agencies

- 1) Marine mammal observations were made by the ship's officers for Mr. M. Bigg, Department of Fisheries and Oceans, Pacific Biological Station, Nanaimo, B.C., Canada.
- 2) Bird observations were made by the ship's officers for Dr. M. Myres, University of Alberta, Calgary, Alberta, Canada and Mr. J. Guiget, Curator of Birds and Mammals, Provincial Museum, Department of Provincial Secretary and Travel Industry, Victoria, British Columbia, Canada.

### OBSERVATIONAL PROCEDURES

The daily surface water temperatures were measured from a bucket sample using a deck thermometer of  $\pm 0.1^{\circ}\text{C}$  accuracy. The daily surface salinity samples were obtained from the seawater loop. When the seawater loop was not operational these samples were obtained with a bucket, and are indicated with a '\*' in this data record.

Salinity determinations were made ashore with a Plessey Model 6600-T thermosalinograph which is used, on Line P, for continuous recording of surface temperatures and salinities from the ship's seawater loop. The temperature probe is mounted at the seawater loop intake (approximately 3 metres below the surface) and the salinity probe and recorder are situated in the dry lab. The accuracy of this instrument is believed to be  $\pm 0.1^{\circ}$ C for temperature and  $\pm 0.1^{\circ}$ /oo for salinity.

STD profiles were taken with a Guildline Model 8700 STD system.

### COMPUTATIONS

Analog traces from the salinity-temperature-pressure instrument have been digitized using a Hewlett-Packard (HP) 9821A calculator and an HP 9864A digitizer, then replotted by an HP 9862A plotter. Digitization was continued until original and computer plotted traces were coincident.

The HP 9821A was then connected to an HP 2116 minicomputer and the digitized data transferred to 9-track tape. Using a UNIVAC 1106 computer the data were listed and obvious spikes removed.

Generally a correction is applied, determined by comparison with hydrographic casts of the same cruise. As no hydrographic casts were taken, the STD data were compared with hydrographic casts from the previous and following cruise.

The differences were very irregular, therefore because of difficulty in

# calibrating no correction has been applied.

Temperature and salinity values were listed at standard pressures and plotted using Houston Complot DP8S Plotter.

Data values which we suspect but which we have included in this data record are indicated with a plus. These data have been removed from magnetic tape records.

The headings for the data listings are explained as follows:

PRESS is pressure (decibars)

TEMP is temperature (degrees Celsius)
SAL is salinity (parts per thousand)

DEPTH is reported in metres

SIGMA-T is specific gravity anomaly SVA is specific volume anomaly

THETA is potential temperature (degrees Celsius)

SVA (THETA) is potential specific volume anomaly

DELTA D is geopotential anomaly (J/kg)

POT EN is potential energy in units of  $10^8$  ergs/cm<sup>2</sup> SOUND is the velocity of sound in metres per second

Data were processed for publication by Messrs. C. de Jong, B. Minkley and J. Linguanti.

#### REFERENCES

- Carpenter, J.H., 1965. The Chesapeake Bay Institute technique for the Winkler dissolved oxygen method. Limnol. and Oceanogr. 10, 141-143.
- Collins, C.A., R.L. Tripe, D.A. Healey and J. Joergensen, 1969. The time distribution of serial oceanographic data from the Ocean Station P programme. Fish. Res. Bd. Can. Tech. Rept. No. 106.
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- U.S.N. Hydrographic Office, 1955. Instruction Manual of Oceanographic Observations. Publ. No. 607.

LOG OF HYDROGRAPHIC AND STD OBSERVATIONS

THE RESIDENCE AND ADDRESS OF THE PARTY OF TH		the sale makes the approximation of the sale		and the same of th			
Consec #	Stations	Date (Z)	Time (Z)	STD (m)	Hydrocast	(m) Co	omments
001	P	04/12/79	1748	1400			
002	. <b>P</b>	05/12/79	0000	300			
003	P	05/12/79	1728	300			
004	P	06/12/79	0000	1400			
005	P	06/12/79	1755	1400			
006	· P	07/12/79	0000	300			
007	P	07/12/79	1715	1400			
008	P	08/12/79	0000	300			
009	P	08/12/79	1840	1400			
010	P	09/12/79	0000	300			
011	P	09/12/79	1715	1400			
012	P	10/12/79	0000	300			
013	P	10/12/79	1735	1400			
014	P P	11/12/79	0000	300			
015	P	11/12/79 12/12/79	1715 0000	1400 300			
016 017	P	12/12/79	1815	1400			
017	P	13/12/79	0000	300			
019	P	13/12/79	1730	1400			
020	P	14/12/79	0000	300			
021	P	14/12/79	1750	300			
022	P .	15/12/79	0000	300			
023	P	16/12/79	1715	1400			
024	P	17/12/79	0000	300			
025	P	18/12/79	1745	1400			
026	P	19/12/79	0000	300			
027	P	19/12/79	1600	1400			
028	P	19/12/79	1645	300			
029	W3	19/12/79	1915	300			
030	W4	19/12/79	2145	300		1	MILE
031	C1	20/12/79	0020	300		>	grid
032	E4	20/12/79	0300	300			
033	E3	20/12/79	0620	300		الر	
034	P	20/12/79	1855	300			
035	. P	21/12/79	0000	1400			
036	P	22/12/79	1800	1400			
037	P	24/12/79 25/12/79	1730	1400 300			
038 039	P P	25/12/79	0000 1730	300			
040	P	26/12/79	0000	300			
041	P	26/12/79	1730	1400			
042	P	27/12/79	0000	300			
043	P	27/12/79	1730	1400			
044	•	2,,12,,,	1,30	2,00		cons	. # not used
045	Р	28/12/79	0000	300			
046	P	28/12/79	1715	1400			
047	P	29/12/79	0000	300			
048	P	30/12/79		1400			
049	P	31/12/79	0000	300			
050	P	31/12/79		1400			
051	P	01/01/80	0000	300			

LOG OF HYDROGRAPHIC AND STD OBSERVATIONS (continued)

Consec #	Stations	Date (Z)	Time (Z)	STD (m)	Hydrocast	(m)	Comments
052	Р	01/01/80	1810	1400	•		
053	P	02/01/80	0000	300			
054	P	02/01/80	1715	1400			
055	P	03/01/80	0000	300			
056	P	04/01/80	0000	1400			
057	P	04/01/80	1730	1400			
058	P	05/01/80	0000	300			
059	P	05/01/80	1715	1400			
060	P	06/01/80	0000	300			
061	P	06/01/80	1715	1400			
062	P	07/01/80	0000	300			
063	P	07/01/80	1715	1400			
064	P	08/01/80	1715	1400			
065	P	08/01/80	1745	300			
066	W3	08/01/80	1925	300			
067	W4	08/01/80	2145	300			
068	C1	09/01/80	0000	300			MILE
069	E4	09/01/80	0300	300			grid
070	E3	09/01/80	0550	300			
071	P	09/01/80	1715	1400			
072	P	10/01/80	0000	300			
073	P	10/01/80	2310	300			
074	12	13/01/80	2330	1400			
075	9	14/01/80	1800	1400			
076	8	15/01/80	0025	1400			
077	7	15/01/80	0645	1400			
078	6	15/01/80	1340	1400			
079	5	15/01/80	2025	1400			line P
080	4	15/01/80	2350	1400			
081	3	16/01/80	0330	1200			
082	2 1	16/01/80	0550	100			
083	1	16/01/80	0745	100			1.

Note: No STD salinity data due to wrong scale settings during observations.

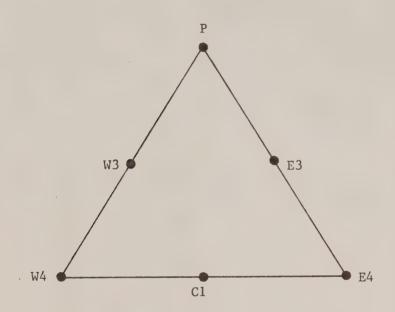
# MILE GRID

# (MIXED LAYER EXPERIMENT)

During the MILE experiment in the summer of 1977 a 20-mile triangular grid was initiated with STD stations to 300 metres.

During this cruise the grid survey was completed three times.

1st - STD consec. #028 - #033 2nd - STD consec. #065 - #070



Station ID and positions are as follows:

 $P = 50^{\circ}00^{\circ}N, 145^{\circ}00^{\circ}W$   $E3 = 49^{\circ}52^{\circ}N, 144^{\circ}52^{\circ}W$   $E4 = 49^{\circ}43^{\circ}N, 144^{\circ}44^{\circ}W$   $C1 = 49^{\circ}42^{\circ}N, 145^{\circ}00^{\circ}W$   $W4 = 49^{\circ}43^{\circ}N, 145^{\circ}15^{\circ}W$  $W3 = 49^{\circ}52^{\circ}N, 145^{\circ}07^{\circ}W$ 

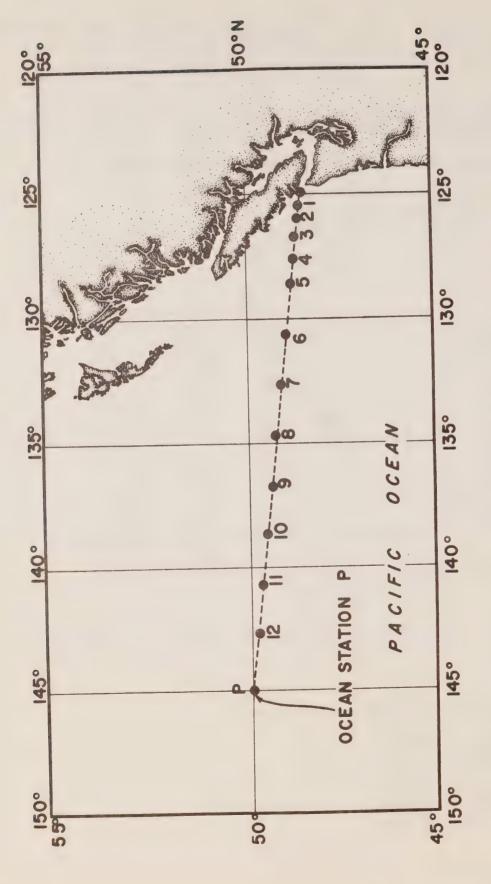


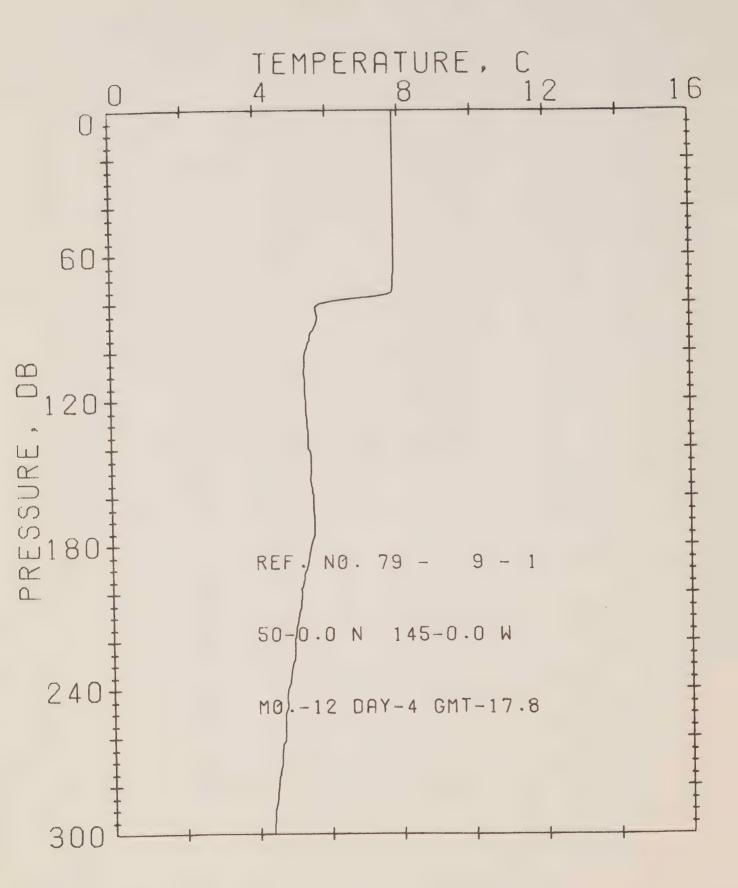
Fig. 1 Chart showing Line P station positions.

Oceanographic Data Obtained on Cruise P-79-9

(MEDS Reference No. 15-79-009)

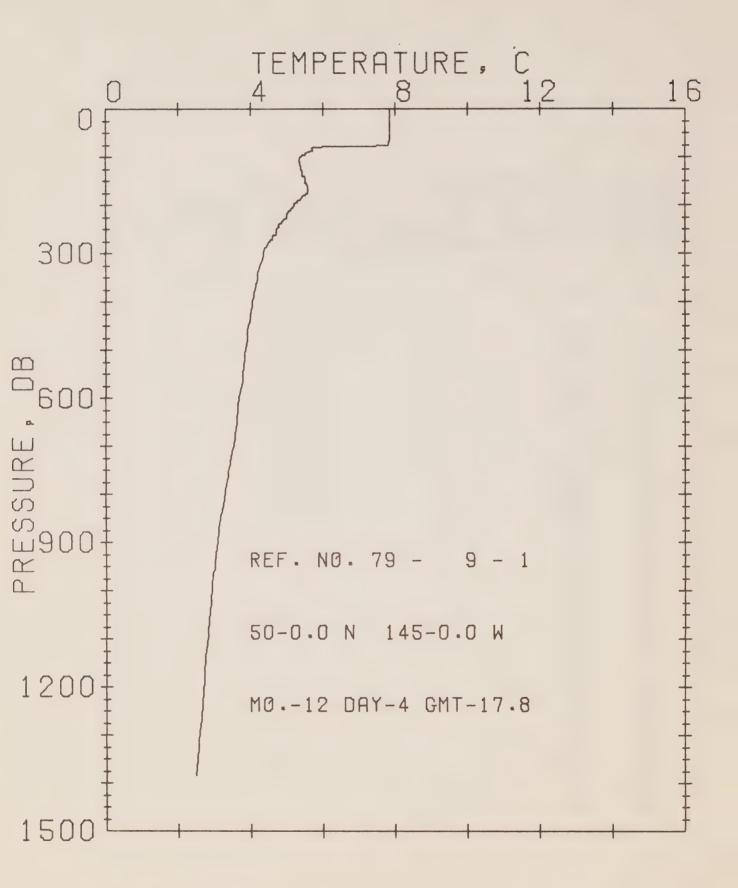


Results of STD Observations (P-79-9)



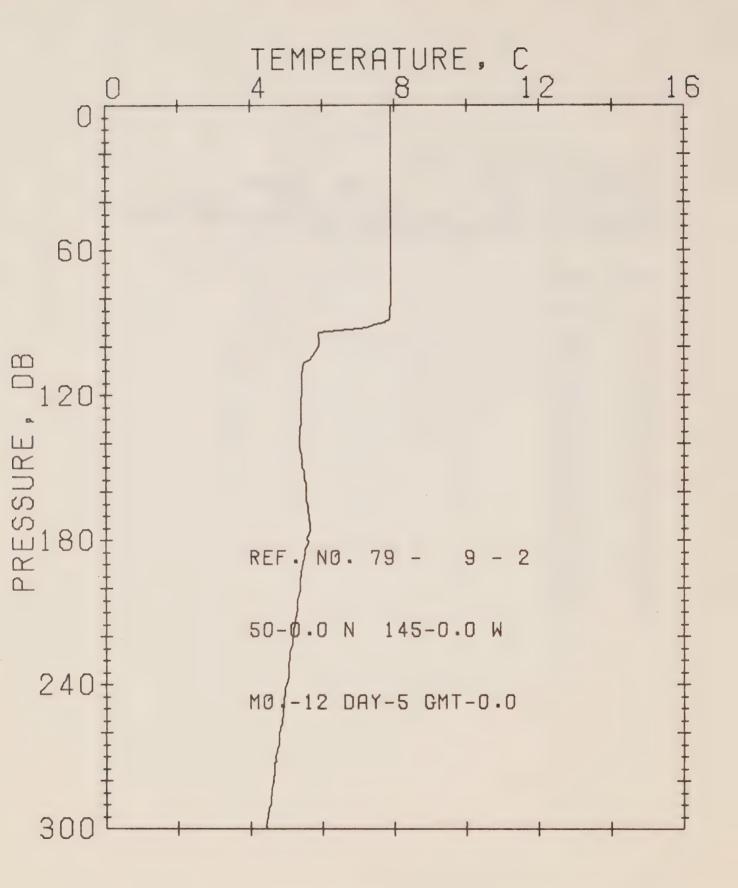
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 1 DATE 4/12/79
POSITION 50- .ON. 145- .OW GMT 17.8 STATION P
RESULTS OF STP CAST 154 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
U	7.87
10	7.87
20	7.87
30	7.87
40	7.87
50	7.87
60	7.87
70	7.85
80	5.81
90	5.65
100	5.39
110 120	5.34
120	5.38
130	3.42
140	5.45
150	5.51
160	5.57
170	5.60
180	5.50
190	5.38
200	5.22
210	5.13
220	5.01
230	4.94
240	4.80
250	4.73
260	4.72
270	4.61
280	4.50
290	4.41
300	4.36



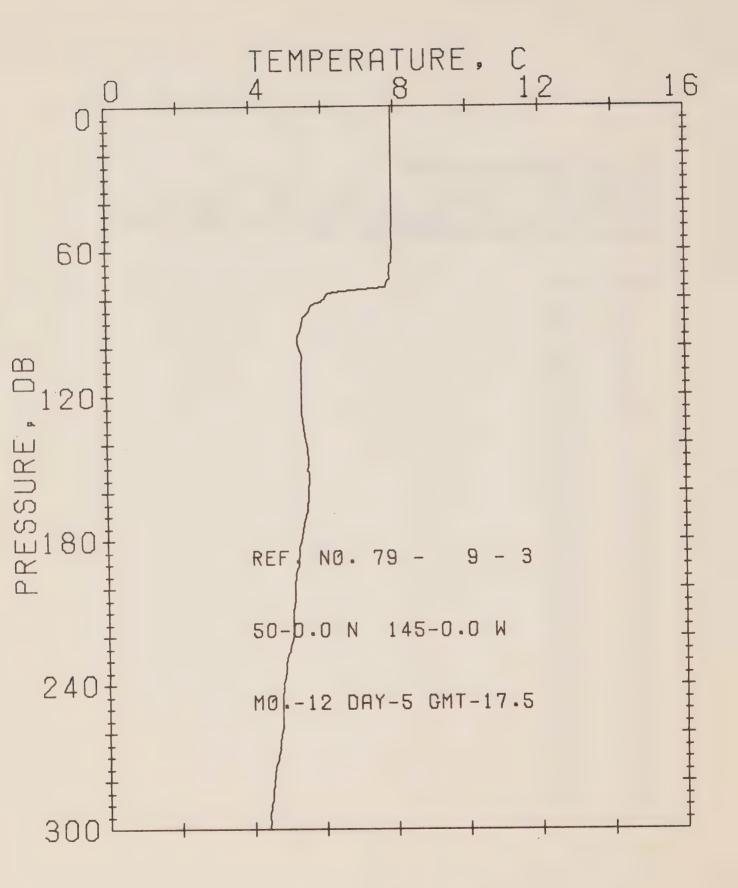
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 1 DATE 4/12/79
POSITION 50- .0N, 145- .0W GMT 17.8 STATION P
RESULTS OF STP CAST 264 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.87
10	7.87
20	7.87
30	7.87
50	7.87
75	7.82
100	5.39
125	5.39
150	5.51
175	5.59
200	5.22
225	5.02
250	4.73
300	4.36
400	4.05
500	3.86
600	3.68
800	3.30
1000	2.93
1200	2.70



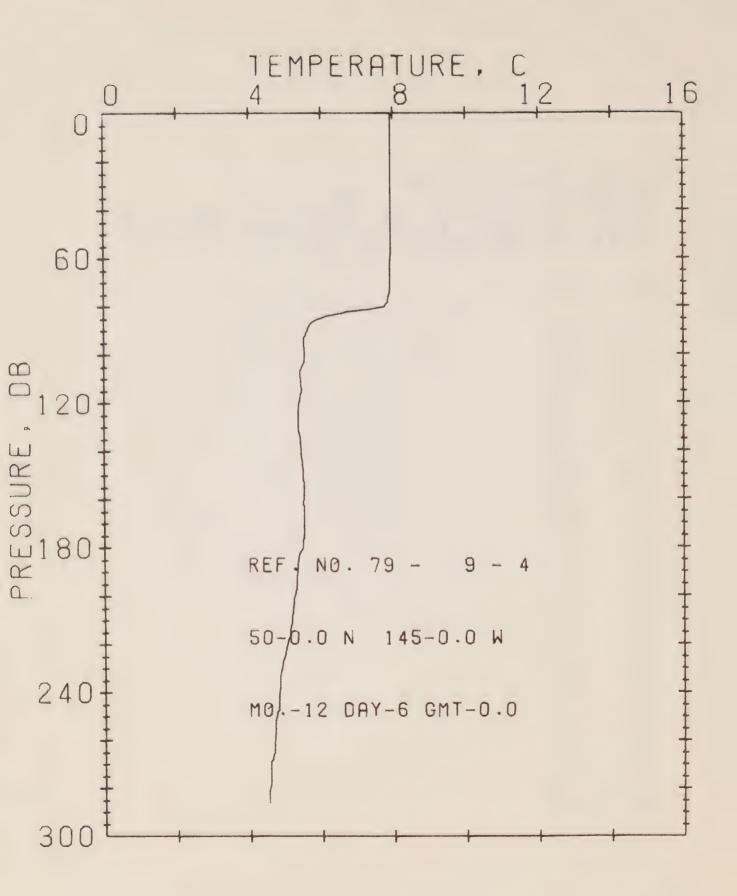
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 2 DATE 5/12/79
POSITION 50- .ON, 145- .OW GMT .O STATION P
RESULTS OF STP CAST 149 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
U	7.92
10	7.92
20	7.92
30	7.92
40	7.92
50	7.92
60	7.92
70	7.92
80	7.92
90	7.77
100	5.91
110	5.46
120	5.43
	5.41
140	5.37
150	5.44
160	5.55
170	5.62
180	5.58
190	5.46
200	5.39
210	5.30 5.19
220	5.19
230	5.09
240	5.02
250	4.92
260	4.81
270	4.70
280	4.64
290	4.57
300	4.42



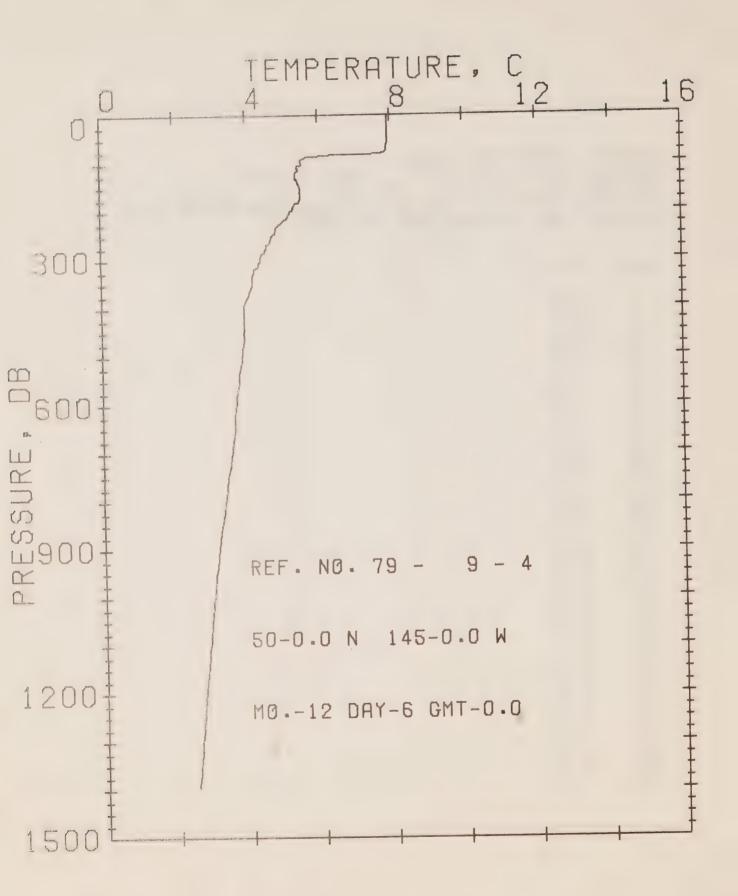
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 3 DATE 5/12/79
POSITION 50- .0N. 145- .0W GMT 17.5 STATION P
RESULTS OF STP CAST 179 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
PRESS  0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250	TEMP  7.94  7.94  7.94  7.94  7.94  7.94  7.94  7.93  7.85  6.05  5.38  5.39  5.41  5.55  5.57  5.57  5.12  5.11  4.94  4.80
250 260 270 280 290	4.80 4.76 4.68 4.54 4.46
300	4.39



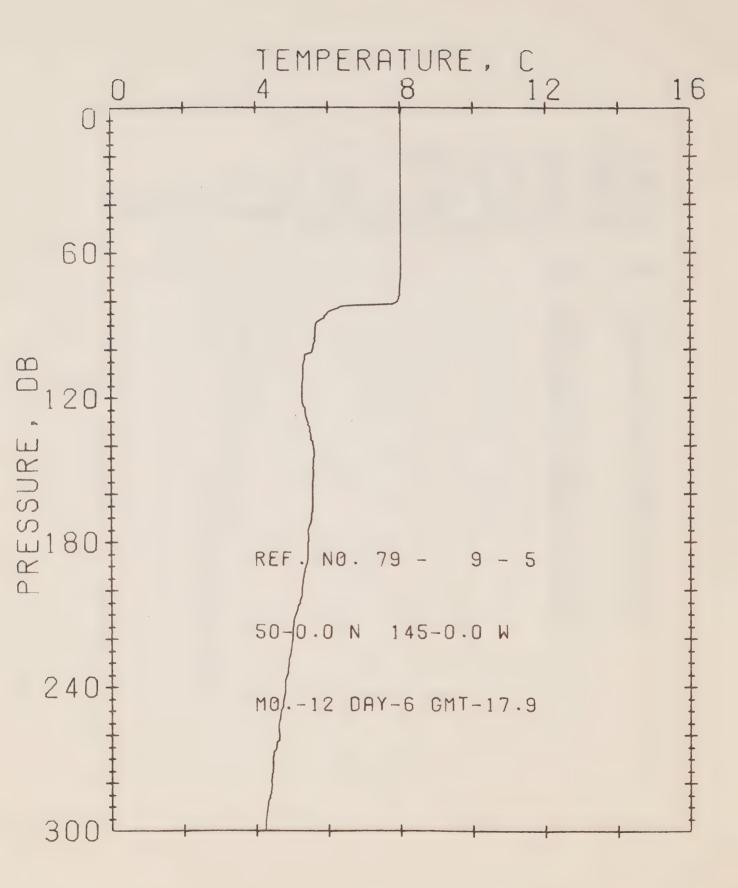
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 4 DATE 6/12/79
POSITION 50- 100. 145- 100 GMT 100 STATION P
RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	7.95
10	7.95
20	7.95
30	7.95
40	7.95
50	7.95
60	7.94
70	7.93
80	7.78
90	5.64
100	5 • 54
110	5.43
120	5.39
130	5.37
140	5.43
150	5.49
160	5.52
170	5.52
180	5.48
190	5.33
200	5.25
210	5.16
220	5.03
230	4.87
240	4.62
250	4.72
260	4.67
270	4.57
280	4.53
290	4.43
300	4.39



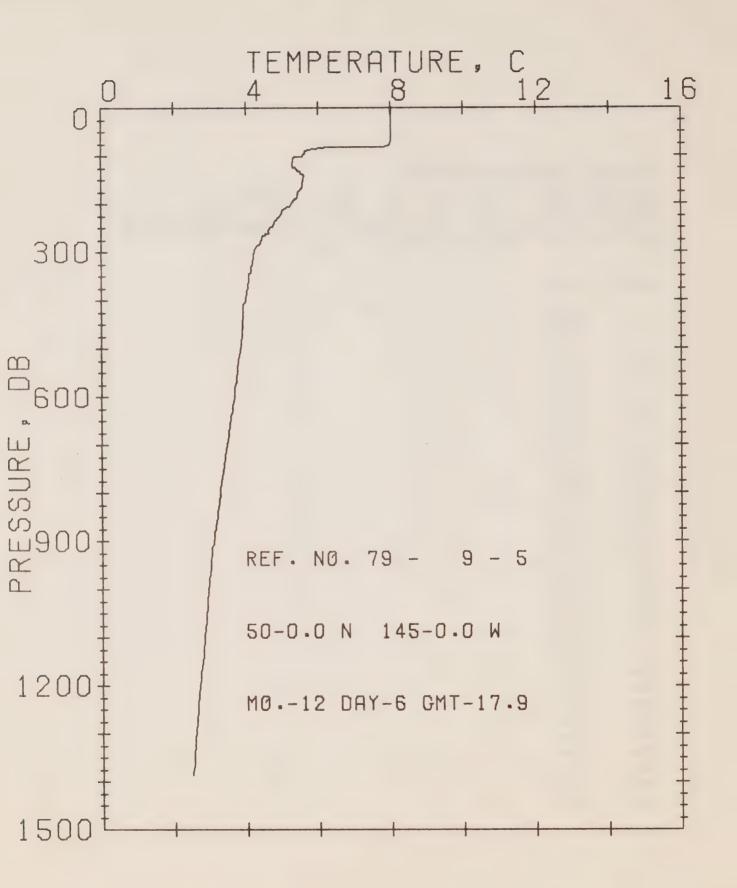
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 4 DATE 6/12/79
POSITION 50- .0N, 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 295 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.95
10	7.95
20	7.95
30	7.95
50	7.95
75	7.89
100	5.54
125	5.37
150	5.49
175	-5.52
200	5.25
225	4.95
250	4.72
	4.39
400	3.93
500	3.84
600	3.66
800	3.34
1000	2.98
	2.71



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 5 DATE 6/12/79
POSITION 50- .0N, 145- .0W GMT 17.9 STATION P
RESULTS OF STP CAST 161 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	8.05
10	8.03
20	8.03
30	8.03
40	8.03
50	8.03
60	8.02
70	8.02
80	7.96
90	5.67
100	9 - 3 -
	5.32
120	5.27
130	5.43
140	5.60
150	5.59
160	5.58
170	5.54
180	5.44
190	5.39
200	5.28
210	5.10
220	5.00
230	4.91
240	4.81
250	4.69
260	4.64
270	4.46
280	4.42
290	4.30
300	4.24



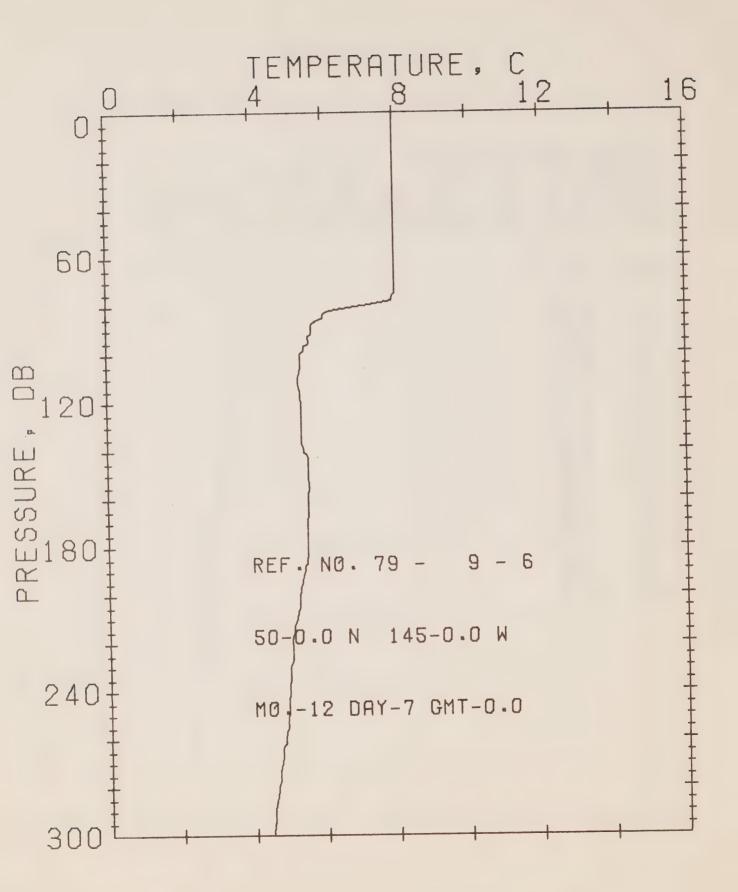
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 5 DATE 6/12/79

POSITION 50- .0N, 145- .0W GMT 17.9 STATION P

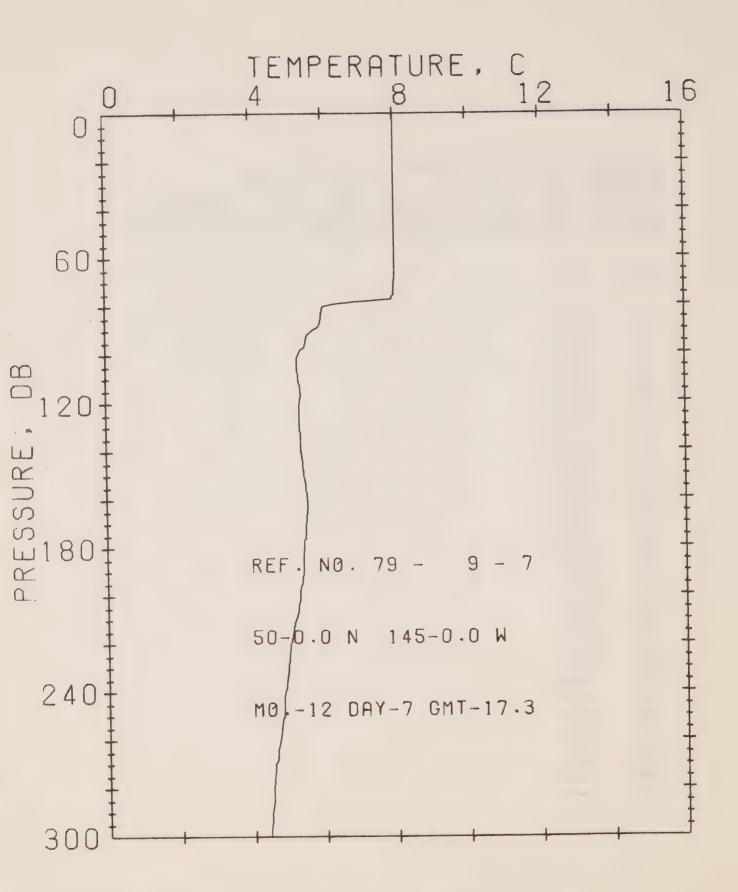
RESULTS OF STP CAST 324 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	8.05
10	8.03
20	8.03
30	8.03
50	8.03
75	8.01
100	5.58
125	5.37
150	5.59
175	5.45
200	5.28
225	4.97
250	4.69
300	4.24
400	4.00
500	3.85
600 .	3.67
800	3.28
1000	2.95
1200	2.70



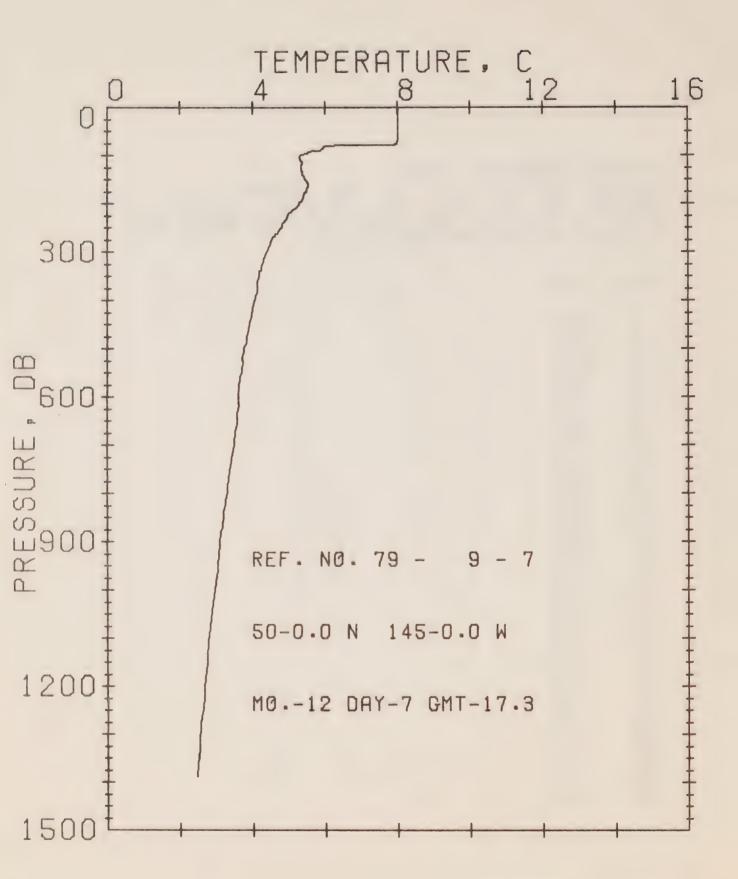
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 6 DATE 7/12/79
POSITION 50- .0N, 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 167 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	8.01
10	8.01
20	8.01
30	8.01
40	8.01
50	8.00
60	8.00
70	8.00
80	7.13
90	5.67
	5.37
110	5.29
120	5.36
130	5.35
140	5.41
150	5.55
160	5.55
170	5.53
180	5.53
190	5.43
200	5.29
210	5.20
220	5.05
230	4.99
240	4.97
250	4.92
260	4.83
270	4.72
280	4.62
290	4.52
300	4.45



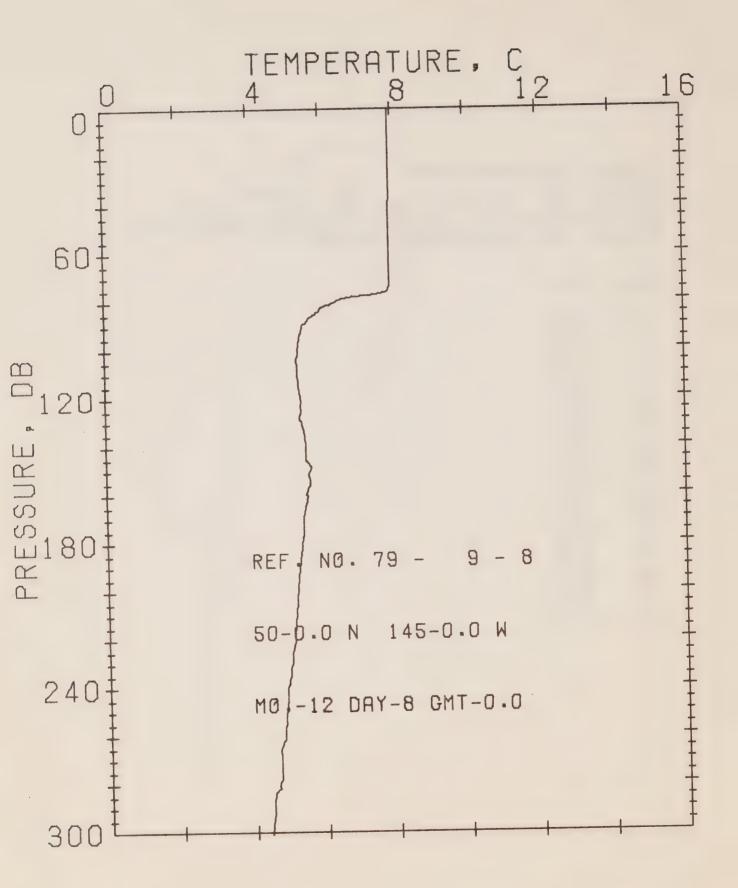
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 7 DATE 7/12/79
POSITION 50- .0N, 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	8.02
10	8.02
20	8.02
30	8.03
40	8.02
50	8.02
60	8.02
70	8.01
80	6.02
90	5.72
100	5.33
110	5.32
120	5.35
130	5.34
140	5.37
150	5.45
160	5.54
170	5.50
180	5.43
190	5.42
200	5.32
210	5.18
220	5.00
230	4.96
240	4.87
250	4.84
260	4.70
270	4.57
280	4.50
290	4.45
300	4.41



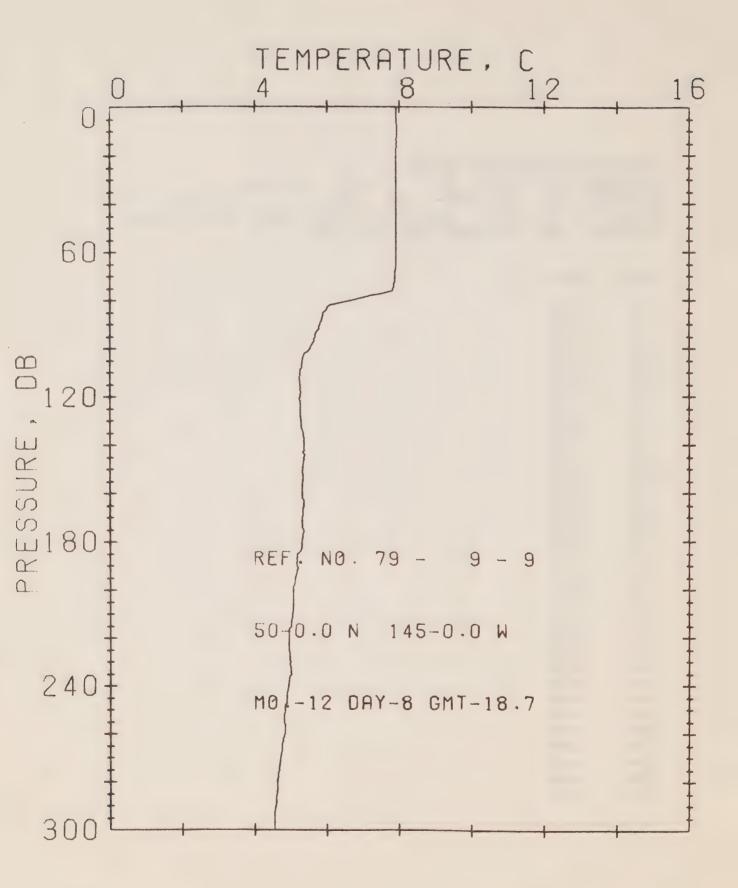
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 7 DATE 7/12/79
POSITION 50- .0N. 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 302 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	8.02
10	8.02
20	8.02
30	8.03
50	8.02
75	8.00
100	5.33
125	5.34
150	5.45
175	5.48
200	5.32
225	4.98
250	4.84
300	4.41
400	4.06
500	3.76
600	3.61
800	3.29
1000	2.95
1200	2.69



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 8 DATE 8/12/79
POSITION 50- .0N, 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 186 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.95
10	7.95
20	7.95
30	7.95
40	7.93
50	7.93
60	7.92
70	7.92
80	6.46
90	5.47
100	5.34
110	5.31
120	5.39
130	5.41
140	5.53
150	5.65
160	5.53
170	5.44
180	5.40
190	5.32
200	5.24
210	5.19
220	5.14
230	5.07
240	4.92
250	4.89
260	4.83
270	4.69
280	4.65
290	4.48
300	4.40



OFF SHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 9 OW GMT 18.7 STATION P

REFERENCE NO. 79- 9- 9 OW GMT 18.7 STATION P

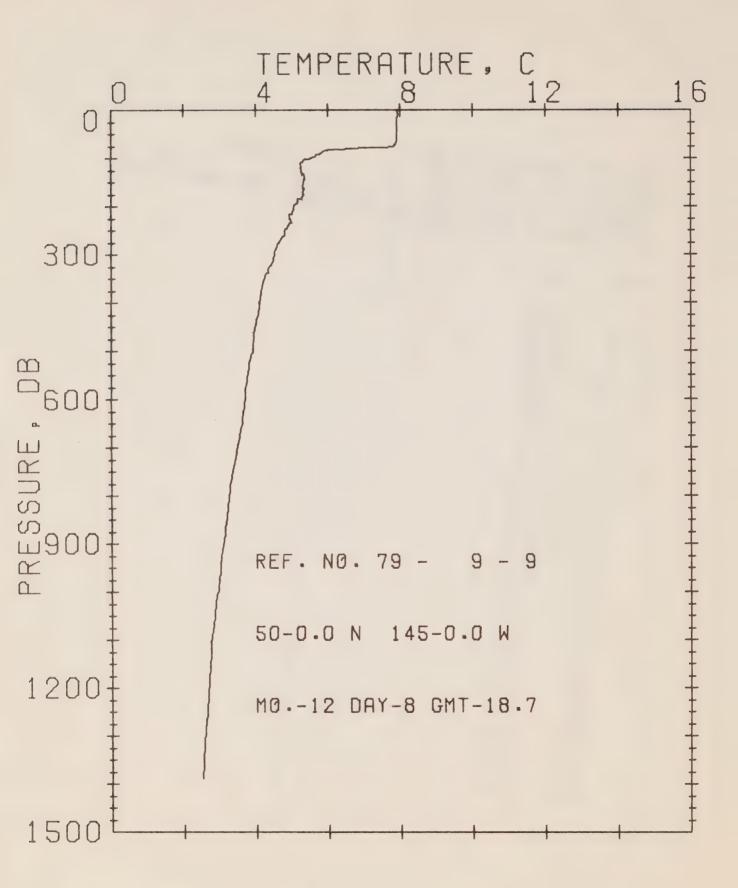
POSITION 50- - ON: 145... OW GMT 18.7 STATION P

RESULTS OF STP CAST 197 POINTS TAKEN FROM ANALOG TRACE

RESULTS OF STP CAST 197 POINTS TAKEN FROM ANALOG TRACE

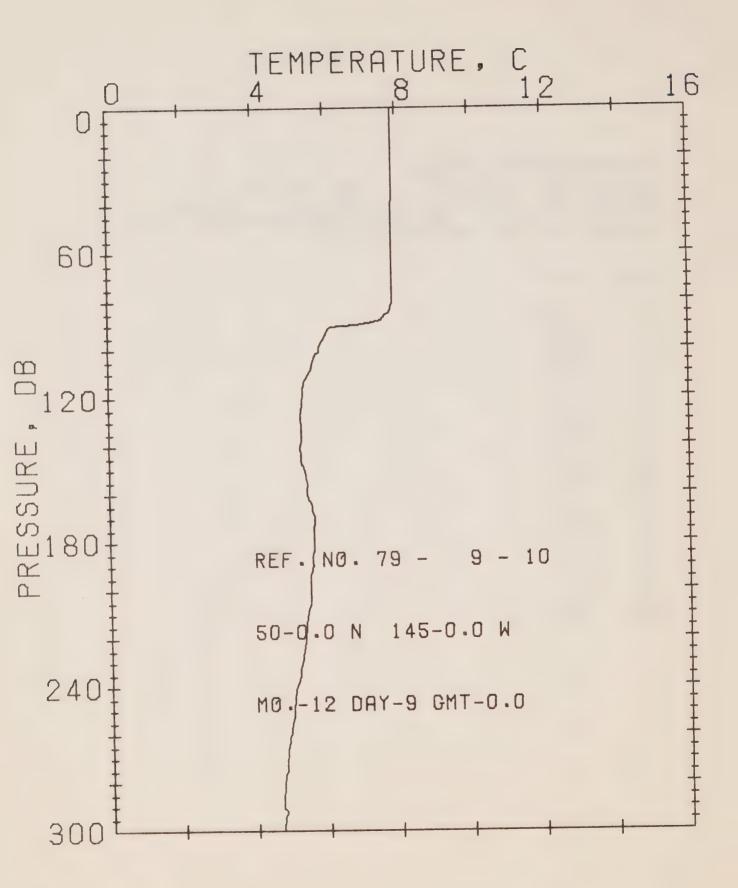
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRE.SS	TEMP
2 <sup>-</sup> 2 2	5.32 5.18 5.08 5.05 4.94 4.98



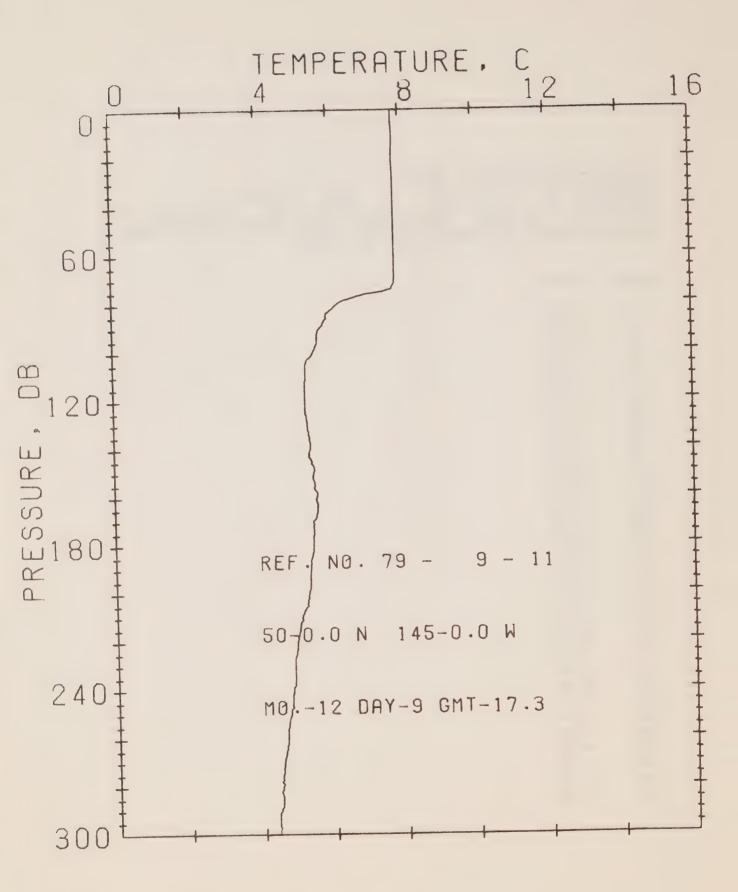
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 9 DATE 8/12/79
POSITION 50- .ON: 145- .OW GMT 18.7 STATION P
RESULTS OF STP CAST 352 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
C	7.93
16	7.96
20	7.92
30	7.92
50	7.93
75	7.85
100	5.54
125	5.25
150	5.33
175	5.37
200	5.08
225	4.94
250	4.84
300	4.54
400	4.10
500	3.93
600	3.70
800	3.26
1000	2.94
1200	2.69
1200	2.09



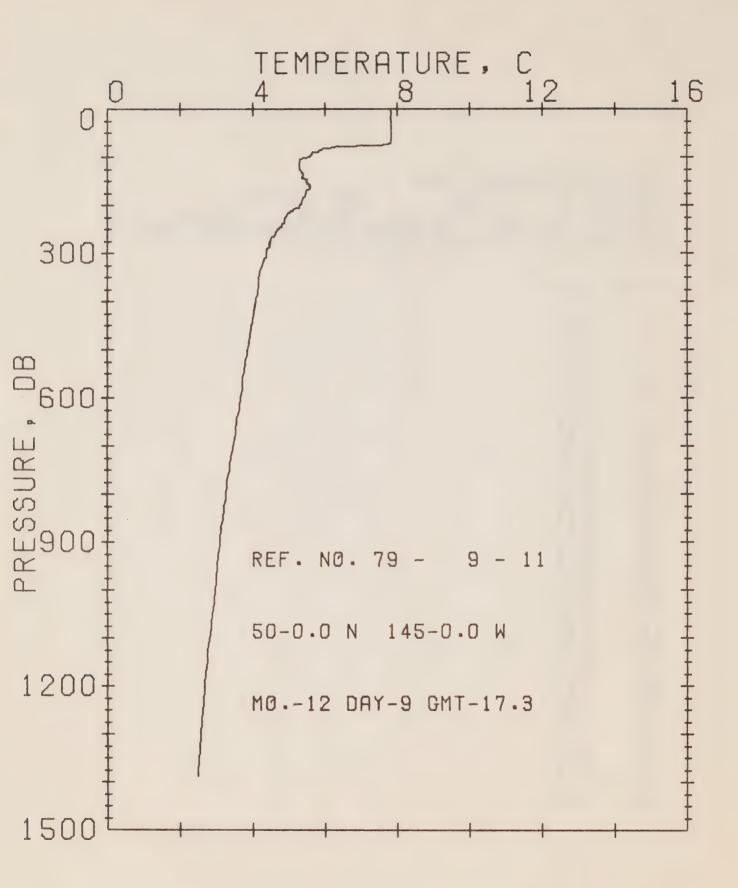
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 10 DATE 9/12/79
POSITION 50- .0N. 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 170 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	7.89
10	7.89
20	7.89
30.	7.89
40	7.88
50	7.88
60	7.88
70	7.88
8ŭ	7.88
90.	6.86
100	5.80
110	5.54
120	5.35
130	5.29
140	5.28
150	5.37
160	5.43
170	5.65
180	5.62
190	5.59
200	5.53
210	5.43
220	5.36
230	5.26
240	5.09
250	5.02
260	4.93
270	4.82
280	4.72
290	4.70 4.70
300	4.70

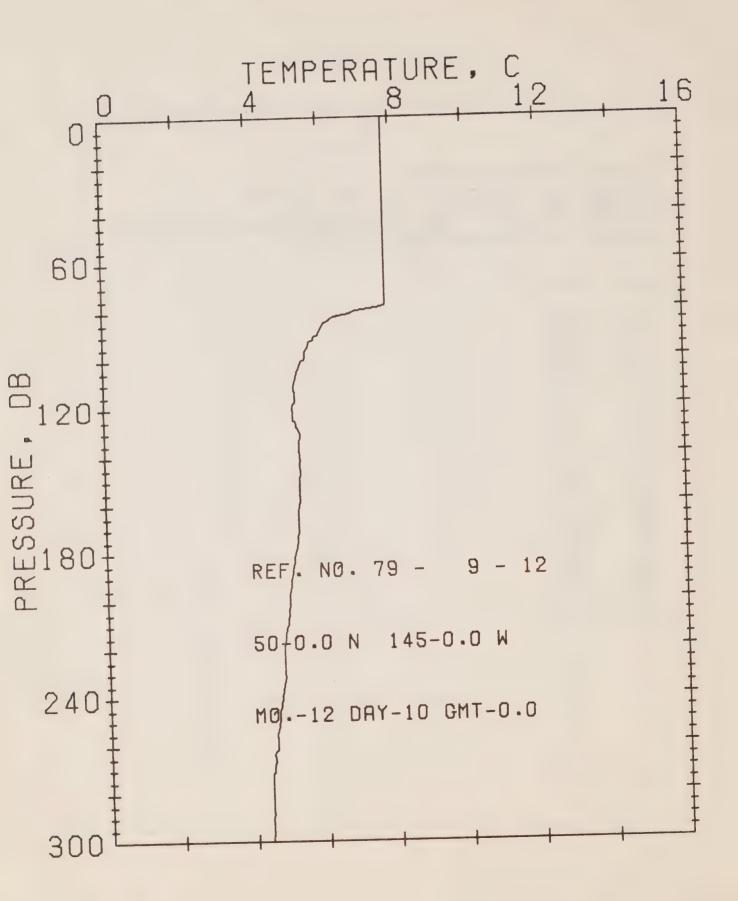


OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 11 DATE 9/12/79
POSITION 50- .0N. 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 186 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	7.82
10	7.83
20	7.82
30	7.83
40	7.83
50	7.83
60	7.83
70	7.83
80	6.25
90	5.74
100	5.53
110	5.31
120	5.27
130	5.33 5.42
140	5.42
150	5.48
160	5.57
170	5.47
180	5.46
190	5.37
200	5.32 5.12
210	5.12
220	4.97
230	4.87
240	4.83
250	4.74
260	4.65
270	4.53
280	4.49
290	4.43
300	4.36

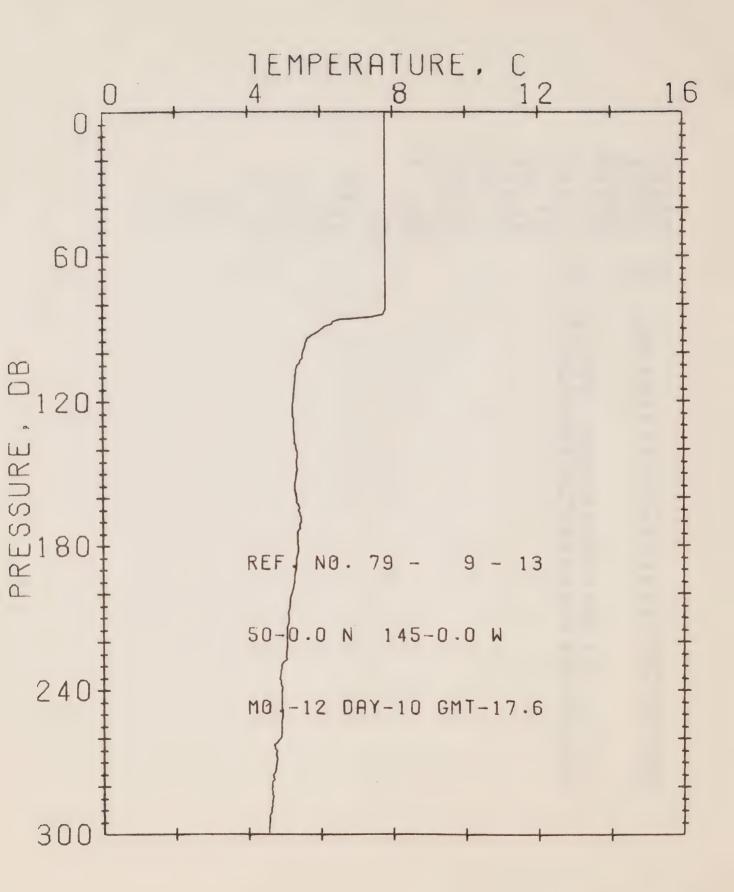


OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 11 DATE 9/12/79
POSITION 50- .ON, 145- .OW GMT 17.3 STATION P
RESULTS OF STP CAST 319 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT



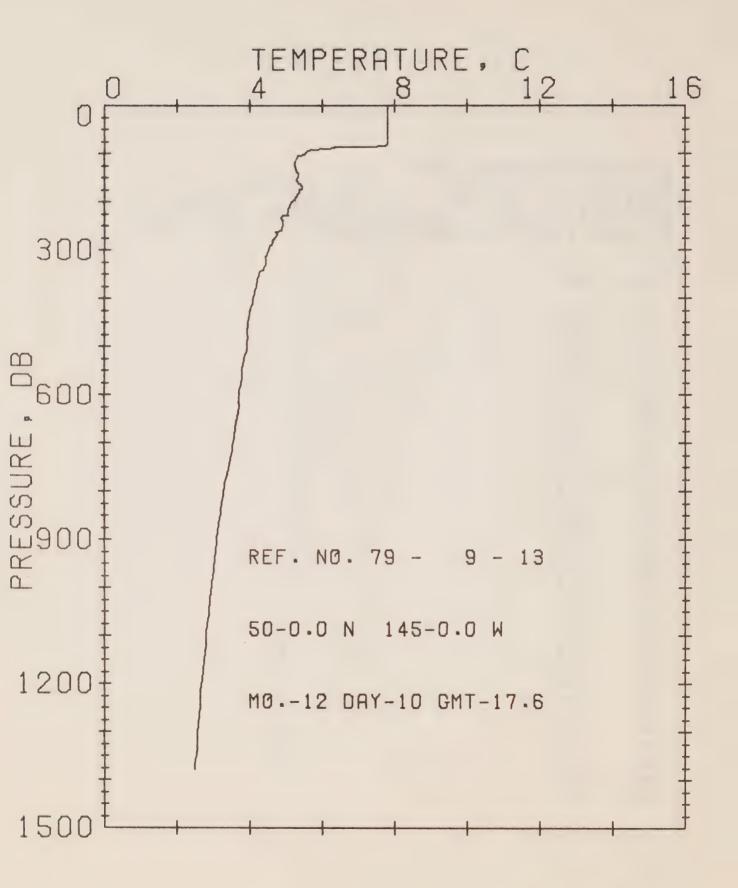
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 12 DATE 10/12/79
POSITION 50- .0N, 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 175 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0 10 20 30 40 50 60 70 80 90 110 120 130 140 150 150 170 180 190 210 220 240 250 260 270 280	7.81 7.81 7.82 7.82 7.82 7.82 7.82 7.82 7.82 7.82
290 300	4.42 4.41



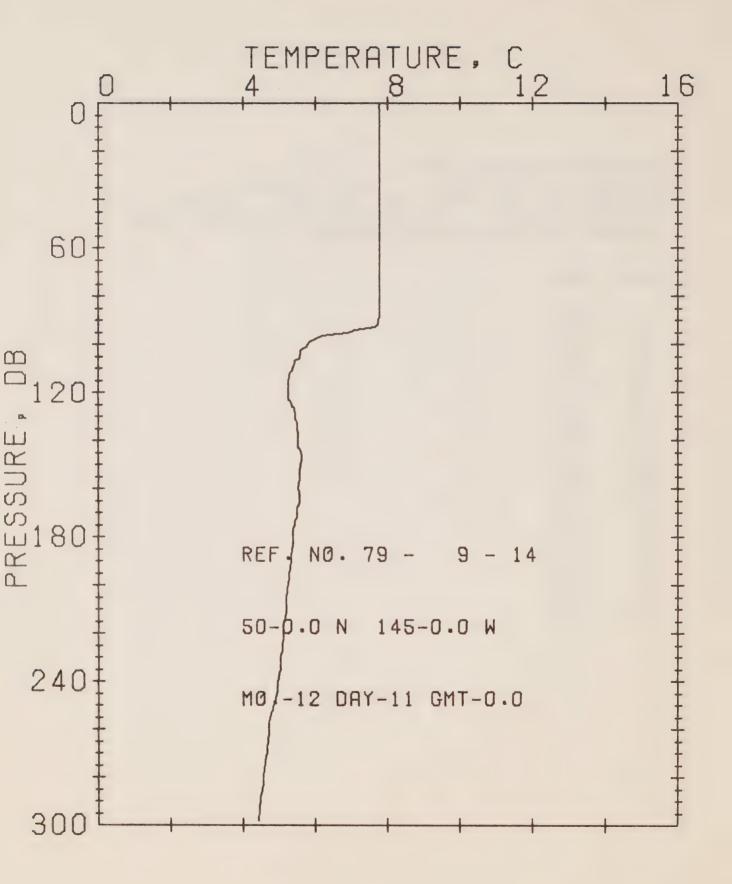
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 13 DATE 10/12/79
POSITION 50- .0N, 145- .0W GMT 17.6 STATION P
RESULTS OF STP CAST 185 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.82
10	7.82
20	7.82
30	7.82
40	7.82
50	7.82
60	7.82
70	7.82
80	7.82
90	6.04
100	5.53
110	5.32
120	5.24
130	5.25
140	5.34
150	5.34
160	5.33
170	5.47
180	5.40
190	5.32
200	5.21
210	5.12
220	5.07
230	4.92
240	4.92
250	4.93 4.87
260	4.77
270 280	4.63
	4.61
290	4.53
300	4.55



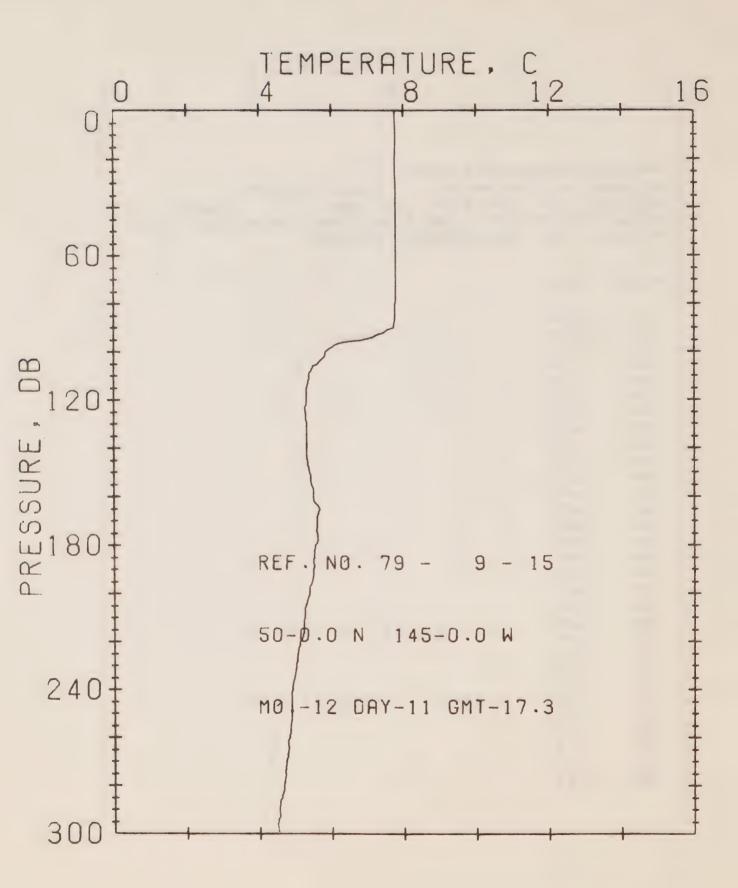
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 13 DATE 10/12/79
POSITION 50- .0N, 145- .0W GMT 17.6 STATION P
RESULTS OF STP CAST 338 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

0 7.82 10 7.82 20 7.82 30 7.82 50 7.82 75 7.82 100 5.53
125 5.23 150 5.34 175 5.36 200 5.21 225 5.04 250 4.93 300 4.53 400 4.10
500 3.93
125 5.23
175 5.36 200 5.21 225 5.04



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 14 DATE 11/12/79
POSITION 50- .0N. 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140	7.78 7.78 7.78 7.79 7.78 7.78 7.78 7.78
150 160 170 180 190 200 210 220 230 240 250 260 270 280 290	5.61 5.53 5.49 5.39 5.34 5.24 5.20 5.13 5.05 4.98 4.86 4.71 4.67 4.47



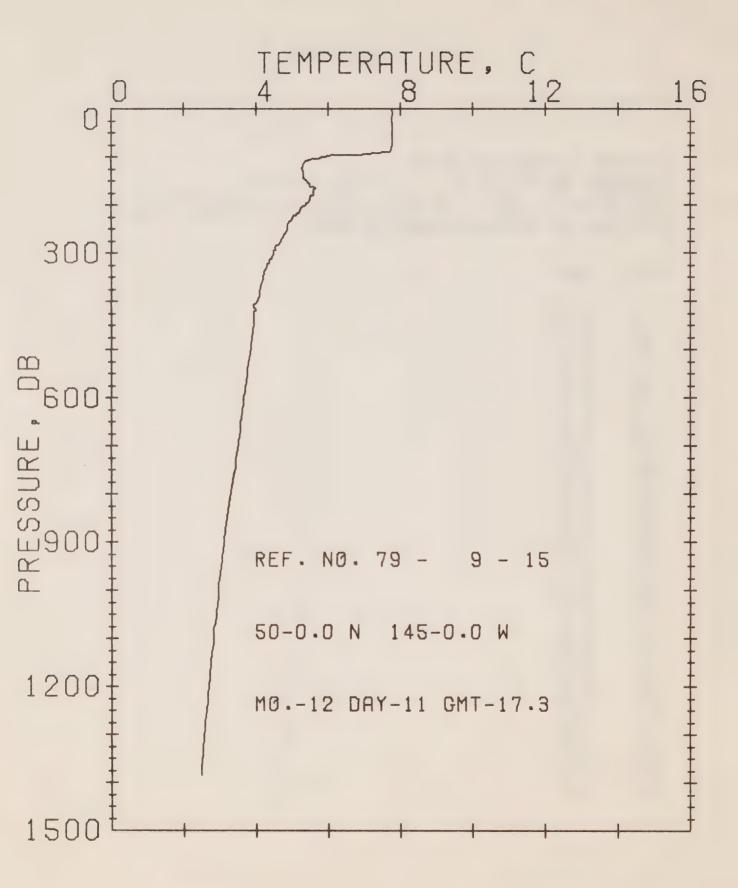
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 15

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 171 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT



OFFSHORE OCEANOGRAPHY GROUP

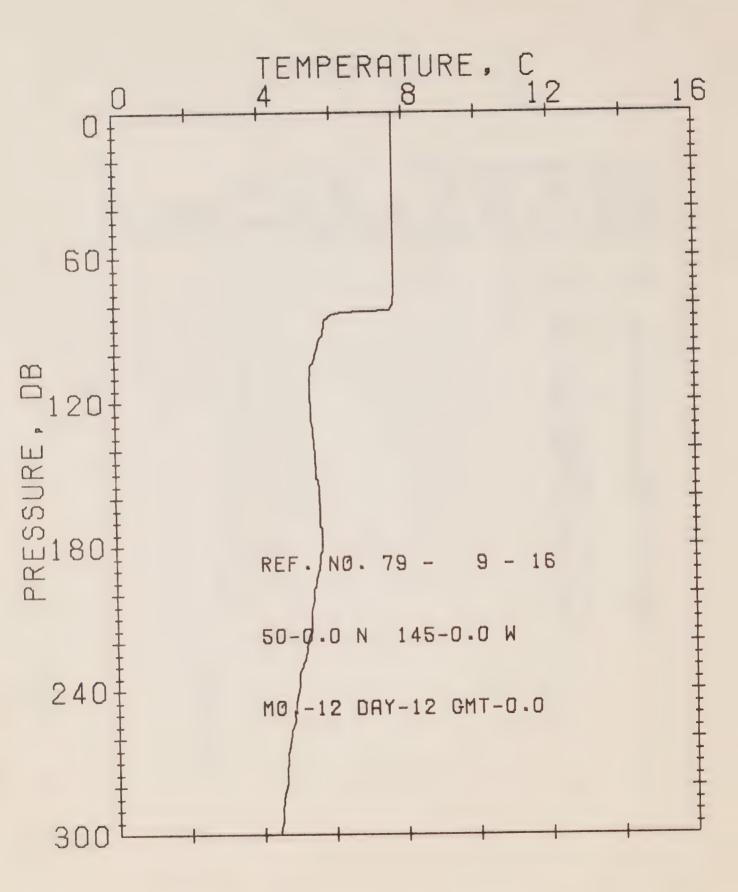
REFERENCE NO. 79- 9- 15 DATE 11/12/79

POSITION 50- .ON: 145- .OW GMT 17.3 STATION P

RESULTS OF STP CAST 311 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
0	7.77
10	7.78
20	7.77
30	7.78
50	7.78
75	7.78
100	5.85
125	5.27
150	5.39
175	5.60
200	5.38
225	5.05
250	4.87
300	4.50
400	4.04
500	3.86
600	3.66
800	3.31
1000	2.96
1200	2.70
2200	_ , ,



OFFSHORE OCEANOGRAPHY GROUP

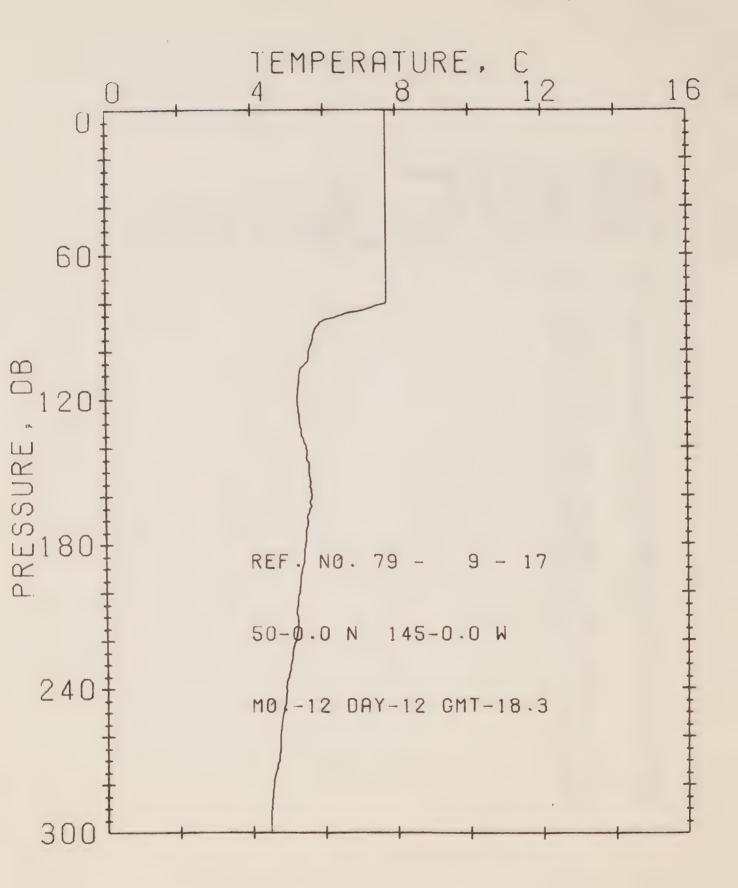
REFERENCE NO. 79- 9- 16 DATE 12/12/79

POSITION 50- .0N, 145- .0W GMT .0 STATION P

RESULTS OF STP CAST 169 POINTS TAKEN FROM ANALOG TRACE

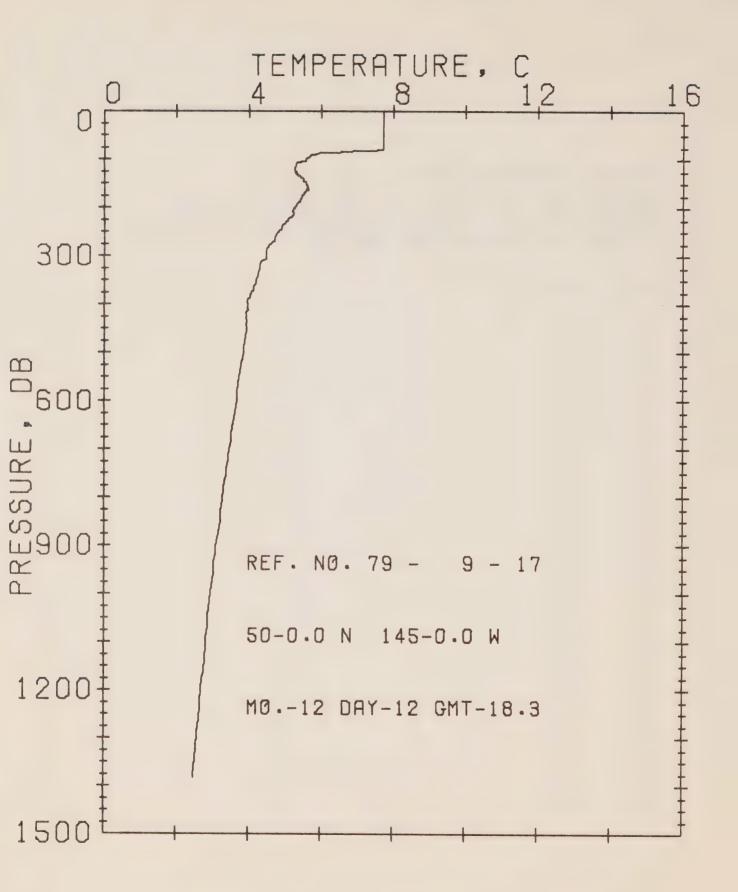
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
Ü	7.73
10	7.73
20	7.74
30	7.74
40	7.74
50	7.74
60	7.73
70	7.72
80	7.70
90	5.78
100	5.55
110	5.36
120	5.37
130	5.42
140	5.48
150	5.51
160	5.60
170	5.64
180	5.69
190	5.59
200	5.44
210	5.37
220	5.26
230	5.11
240	4.99
250	4.86
260	4.76
270	4.66
280	4.62
290 300	4.52
300	4:39

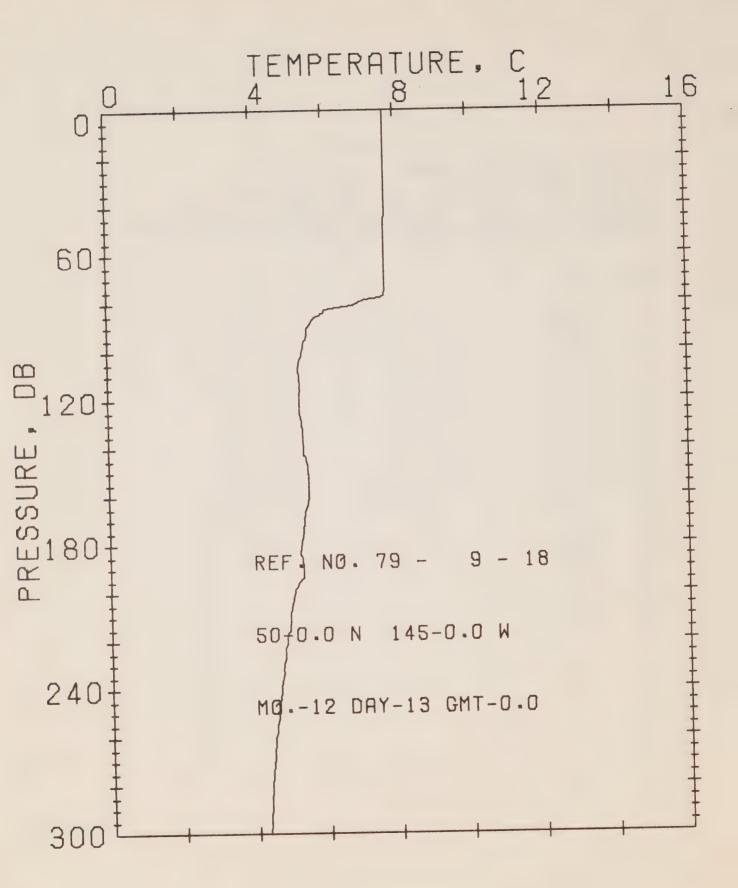


OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 17 DATE 12/12/79
POSITION 50- .0N. 145- .0W GMT 18.3 STATION P
RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	7.73
10	7.73
20	7.73
30	7.73
40	7.73
50	7.73
60	7.73 7.73 7.73
70	7.73
80	7.73
90	5.79
100	5.58
110	5.32
120	5.26
130	5.33
140	5.50
150	5.58
160	5.66
170	5.55 5.47
180	5 30
190	5.39 5.31
200	5.26
210	
220	5.19
230	5.05
240	4.93
250	4.83
260	4.76 4.71
270	4.71
280	4.56
290	4.50 4.47
300	4 • 4 /

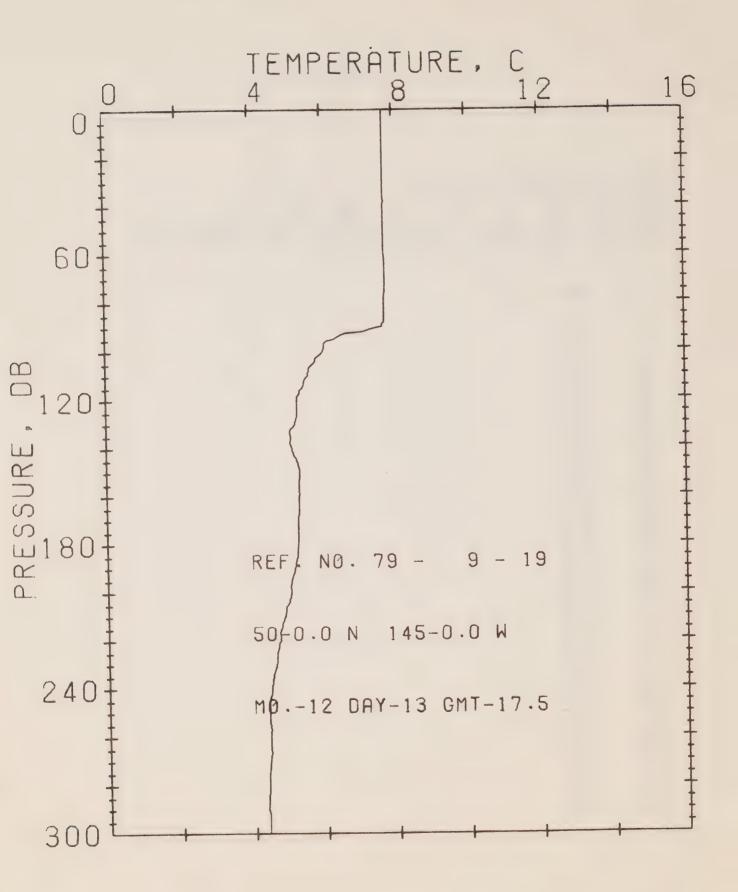


OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 17 DATE 12/12/79
POSITION 50- .ON: 145- .OW GMT 18.3 STATION P
RESULTS OF STP CAST 300 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT



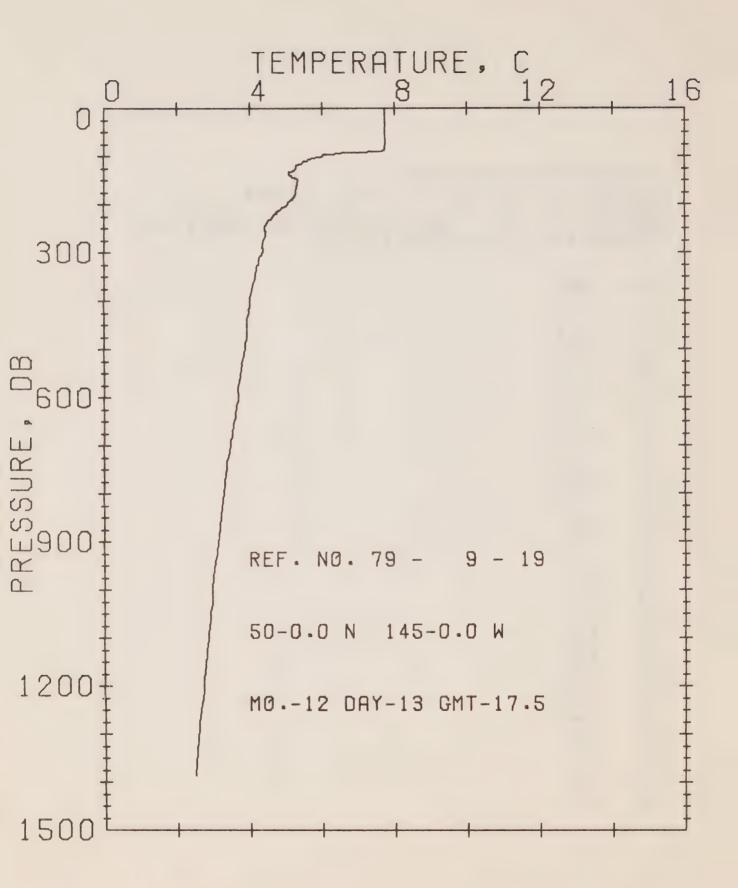
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 18 DATE 13/12/79
POSITION 50- .0N, 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 166 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.73
10	7.73
20	7.73
30	7.72
40	7.72
50	7.72 7.71
60	7.71
70	7.70
80	6.95
90	5,58
100	5.40 5.27 5.27
110	5.27
120	5.27
130	5.34
140	5•34 5•38
150	5.50 5.52
160	5.52
170	5.39
180	5.31
190	5.34
200	5.09 4.97
210	4.97
220	4.86
230	4.76
240	4.67
250	4.60
260	4.49
270	4.44
280	4.38
290	4.34
300	4.29



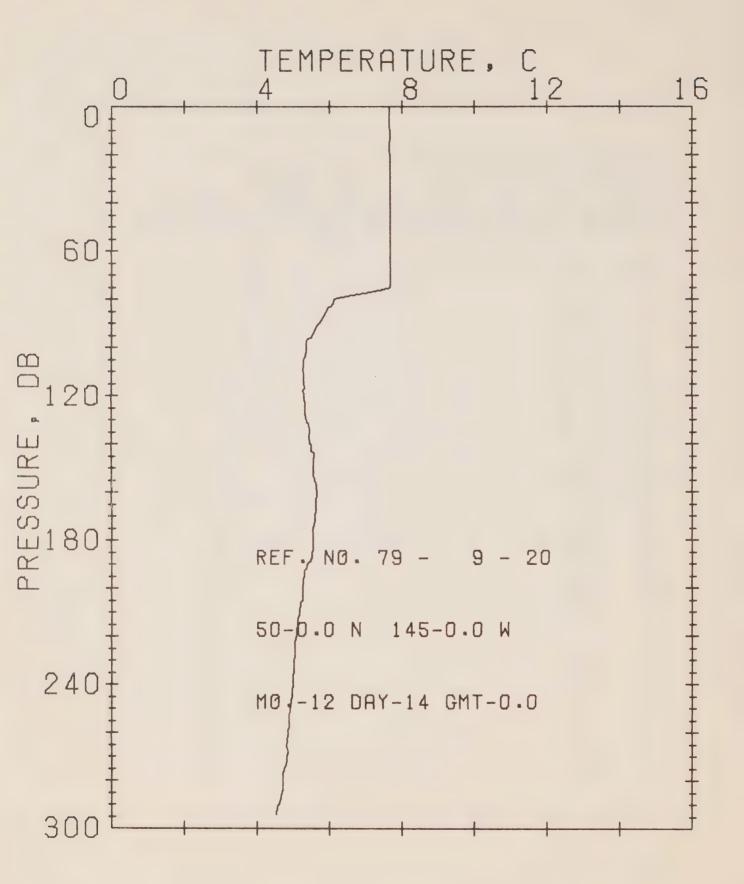
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 19 DATE 13/12/79
POSITION 50- .0N. 145- .0W GMT 17.5 STATION P
RESULTS OF STP CAST 188 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
O	7:73
10	7.73
20	7.74
30	7.74
40	7.74
50	7.74
60	7.74
70	7.75
80 .	7.74
90	7.69
100	6.02
110	5.59
120	5.27
130	5.22
140	5.12
150	5.34 5.32
160	5.32
170	5.29
180	5.27
190	5.17
200	5.06
210	4.87
220	4.74
230	4.60
240	4.48
250	4.41
260	4.44
270	4.42
280	4.37
290	4.33
300	4.35



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 19 DATE 13/12/79
POSITION 50- .0N, 145- .0W GMT 17.5 STATION P
RESULTS OF STP CAST 344 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0 10	7.73 7.73
20	7.74
30	7.74
50	7.74
75	7.75
100	6.02
125	5.28
150	5.34
175	5.29
200	5.06
225	4.64
250	4.41
300	4.35
400	4.01
500	3.87
600	3.67
800	3.29
1000	2.97
1200	2.72
21200	_ , _



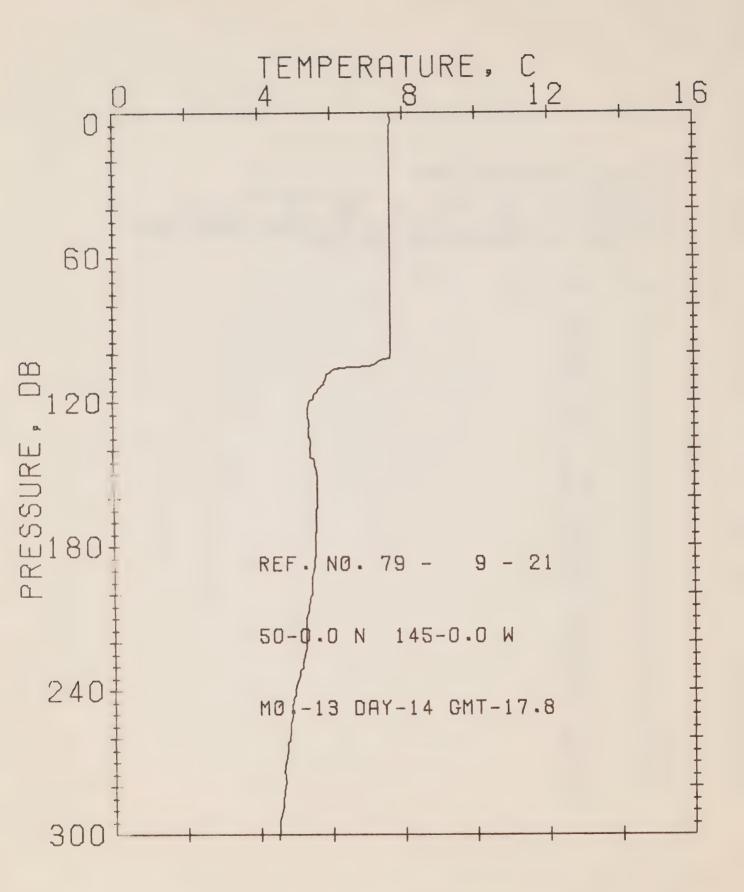
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 20 DATE 14/12/79

POSITION 50- .ON: 145- .OW GMT .O STATION P

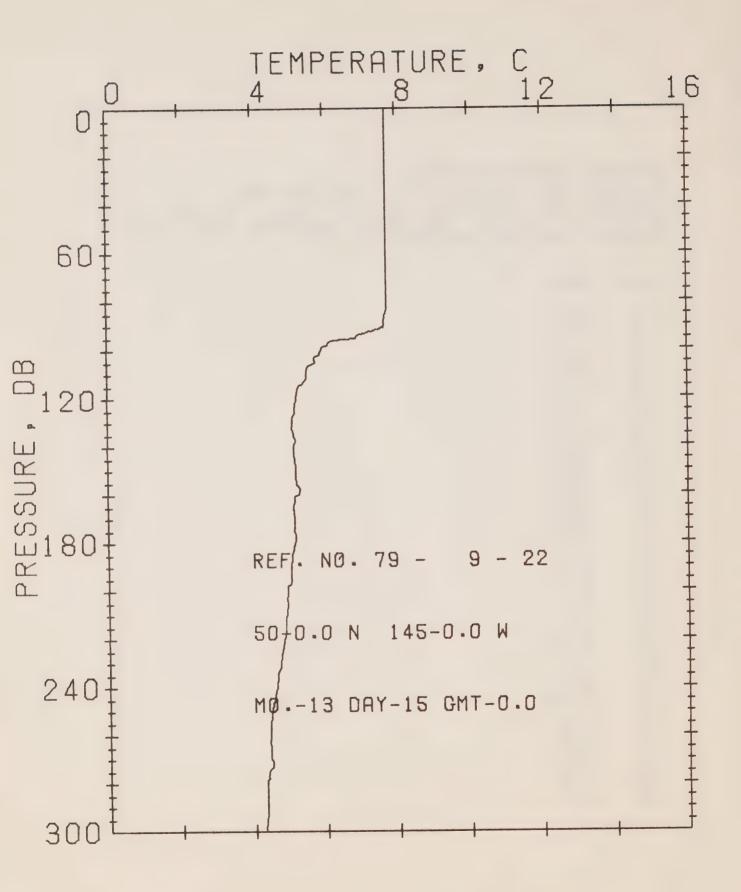
RESULTS OF STP CAST 173 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
0	7.66
10	7.67
20	7.67
30	7.67
40	7.67
50	7.67
60	7.67
70	7.67
80	6.13
90	5.72 5.36
100	5.36
110	5.26
120	5.27
130	5.34
140	5.44
150	5.55
160	5.66
170	5.60
180	5.55
190	5.40
200	5.26
210	5.18
220	5.09
230	5.03
240	4.98
250	4.91
260	4.86
270	4.84
280	4.73
290	4.60



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 21 DATE 14/13/79
POSITION 50- .0N, 145- .0W GMT 17.8 STATION P
RESULTS OF STP CAST 146 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.67
10	7.65
20	7.66
30	7.66
40	7.66
50	7.66
60	7.66
70	7.66
80	7.66
90	7.66
100	7.65
110	5.85
120	5.39
130	5.39
140	5.40
150	5.58
160	5.59
170	5.57
180	5.55
190	5.50
200	5.43
210	5.29
220 230	5·27 5·17
240	4.97
250	4.87
260	4.81
270	4.69
280	4.68
290	4.59
300	4.51
000	



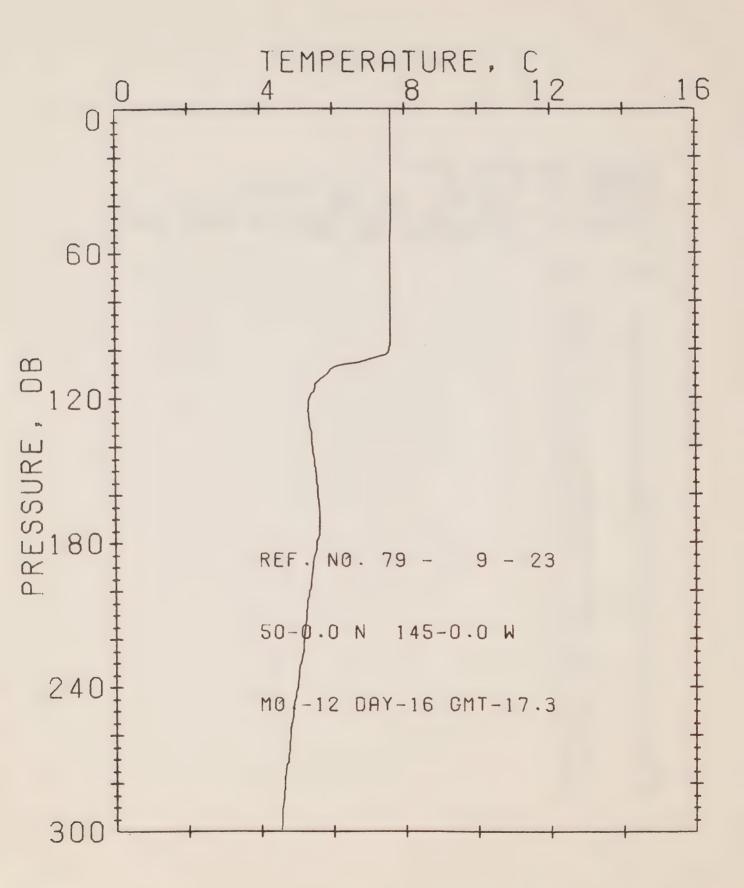
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 22 DATE 15/13/79

POSITION 50- .0N. 145- .0W GMT .0 STATION P

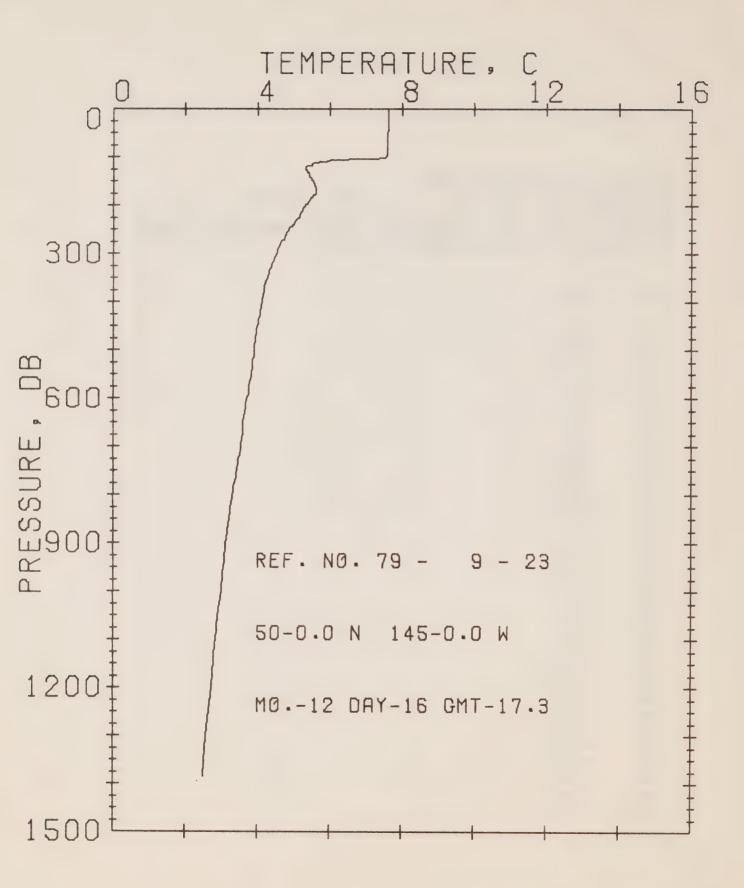
RESULTS OF STP CAST 158 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	7.74
10	7.74
20	7.74
30	7.74
40	7.74
50	7.74
60	7.74
70	7.74
80	7.73
90	7.65
100	5.93
110	5.50
120	5.19
130	5.10
140	5.13
150	5.17
160	5.28
170	5.14
180	5.16
190	5.05
200	4.93
210	4.90
220	4.83
230	4.73
240	4.61
250	4.48
260	4.43
270	4.44
280	4.32
290	4.32
300	4.27

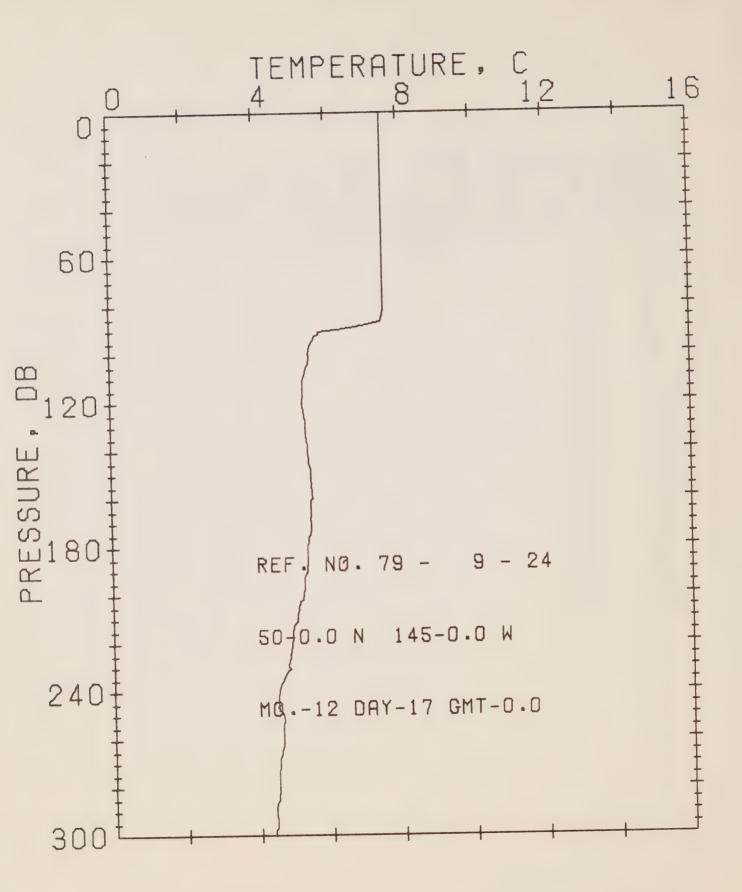


OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 23 DATE 16/12/79
POSITION 50- .0N, 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 138 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.62
10	7.62
20	7.62
30	7.62
40	7.62
50	7.61
60	7.61
70	7.61
80	7.60
90	7.60
100	7.58
110	5.88
120	5.37
130	5.35
140	5.43
150	5.53
160	5.57
170	5.63
180	5.55
190	5.43
200	5.34
210	5.25
220	5.19
230	5.10
240	5.01
250	4.88
260	4.79
270	4.75
280	4.58
290	
300	4.53



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 23 DATE 16/12/79
POSITION 50- .0N. 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 247 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT



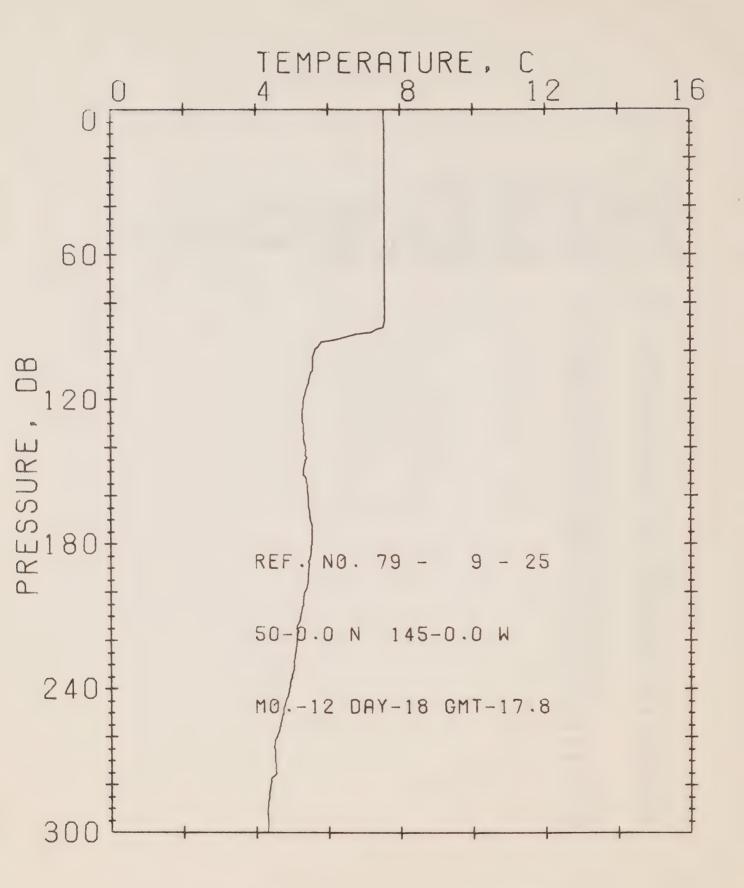
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 24 DATE 17/12/79

POSITION 50- .ON, 145- .OW GMT .O STATION P

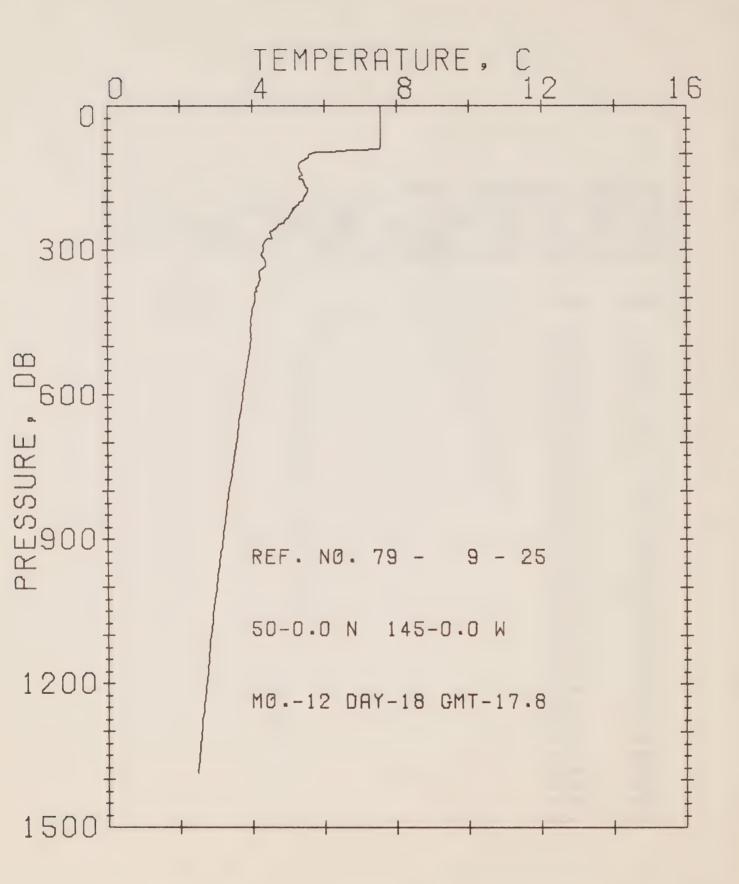
RESULTS OF STP CAST 165 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	7.58
10	7.58
20	7.58
30	7.58
40	7.58
50	7.58
60	7.57
70	7.57
80	7.56
90	6.30
100	5.47
110	5.34
120	5.29
130	5.35
140	5.41
150	5.48
160	5.54
170	5.49
180	5.40
190	5.36
200	5.25
210	5.07
220	4.90
230	4.80
240	4.54
250	4.64
260	4.64
270	4.54
280	4.52
290	4.39
300	4.37



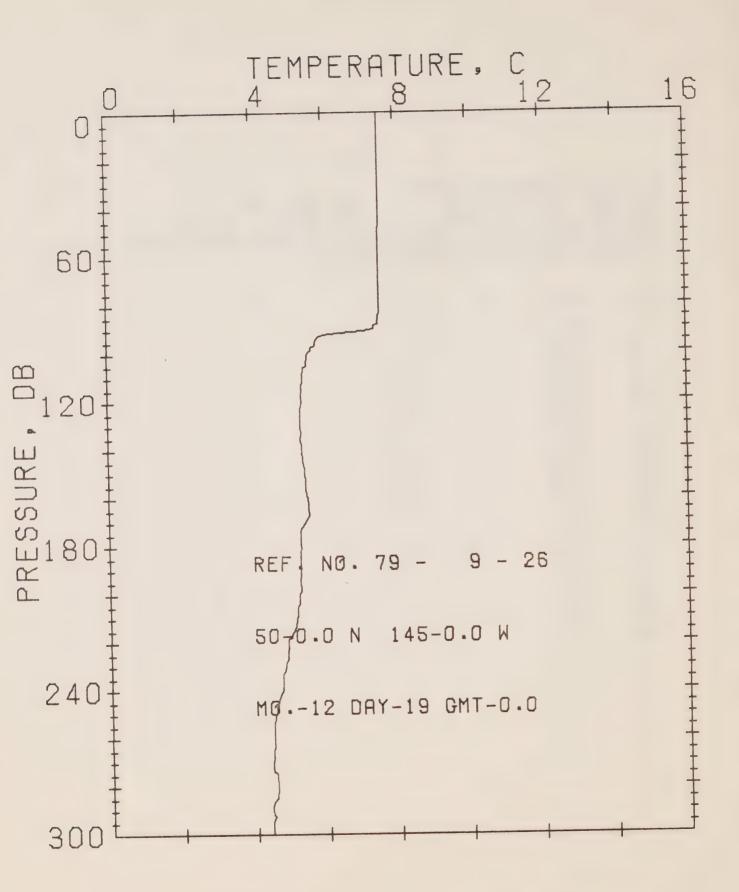
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 25 DATE 18/12/79
POSITION 50- .0N. 145- .0W GMT 17.8 STATION P
RESULTS OF STP CAST 163 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	7.55
10	7.56
20	7.56
30	7.56
40	7.56
50	7.56
60	7.56
70	7.56
80	7.56
90	7.55
100	5.62
110	5.50
120	5.33
130	5.30
140	5.36
150	5.30
160	5.44
170	5.49
180	5.54
190	5.45
200	5.33
210	5.23
220	5.13
230	5.03
240	4.91
250	4.74
260	4.56
270	4.52
280	4.39
290	4.30
300	4.30



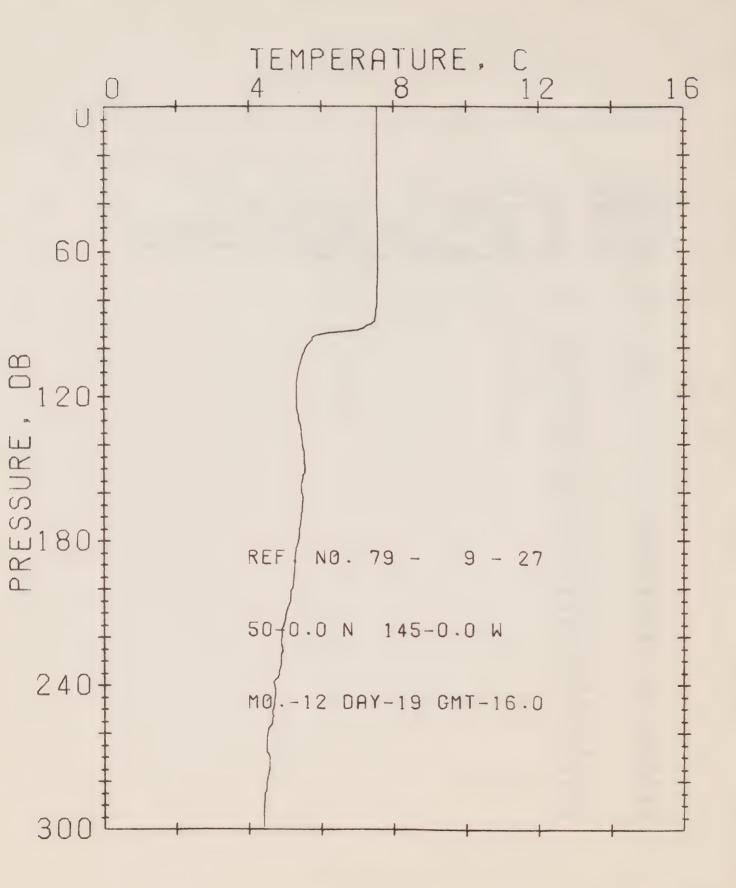
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 25 DATE 18/12/79
POSITION 50- .0N, 145- .0W GMT 17.8 STATION P
RESULTS OF STP CAST 310 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
O	7.55
10	7.56
20	7.56
30	7.56
50	7.56
75	7.56
100	5.62
125	5.27
150	5.30
175	5.54
200	5.33
225	5.08
250	4.74
300	4.30
400	4.07
500	3.94
600	3.73
008	3.36
1000	3.01
1200	2.74



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 26 DATE 19/12/79
POSITION 50- .ON. 145- .OW GMT .O STATION P
RESULTS OF STP CAST 156 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
O	7.56
10	7.57
20	7.57
30	7.56
40	7.57
50	7.56
60	7.55
70	7.55
80	7.54
90	7.38
100	5.55
110	5.40
120	5 • 35
130	5.31
140	5.34
150	5.42
160	5.49
170	5.44
180	5.28
190	5.27
200	5.26
210	5.15
220	4.91
230	4.83
240	4.74
250	4.54
260	4.48
270	4.44
280	4.55
290	4.39
300	4.44



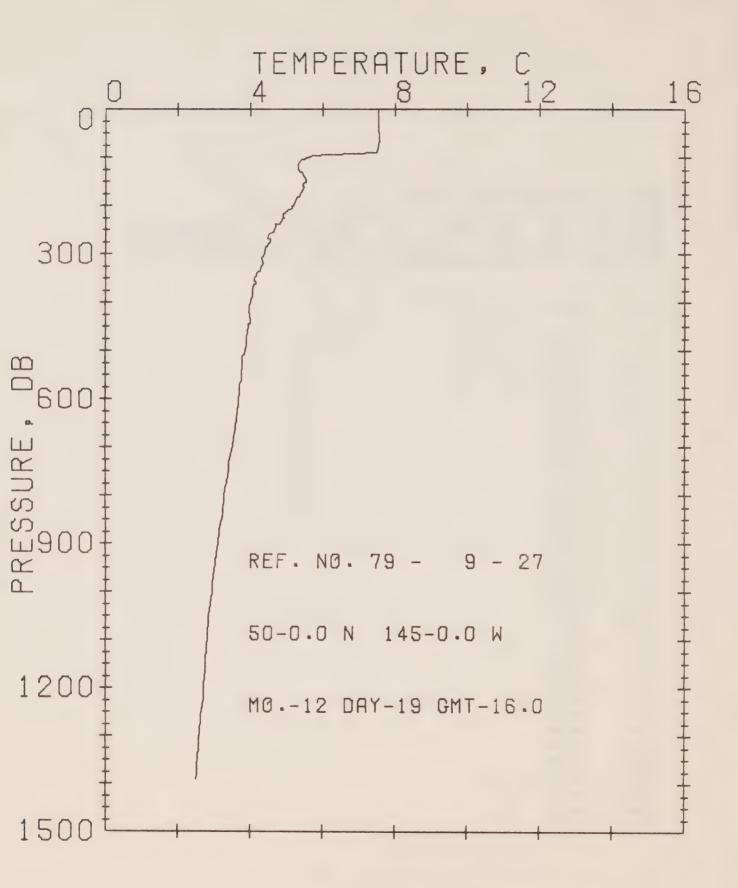
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 27 DATE 19/12/79

POSITION 50- .ON. 145- .OW GMT 16.0 STATION P

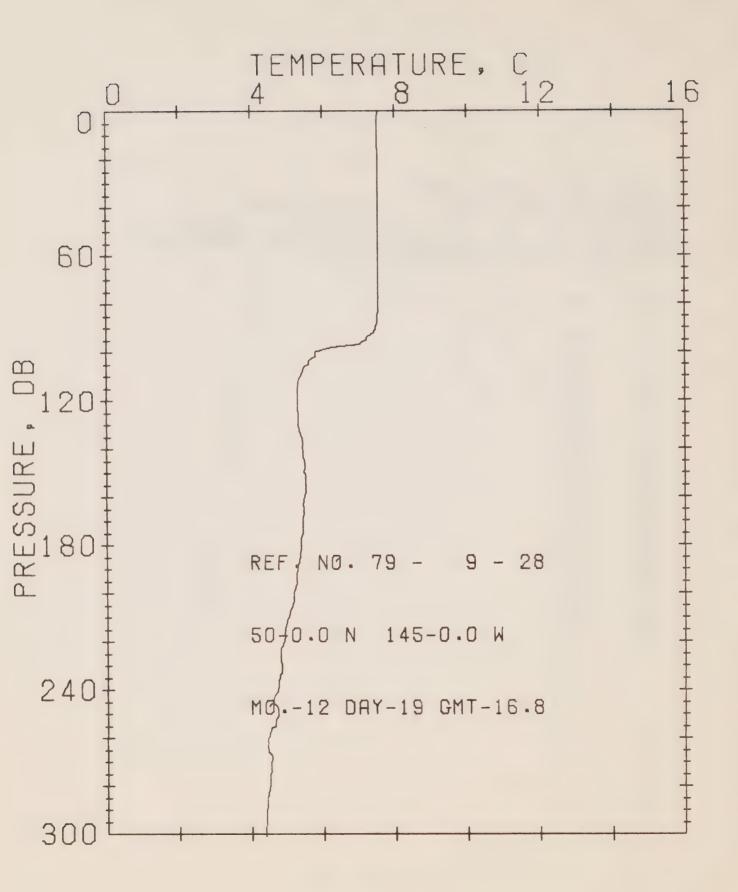
RESULTS OF STP CAST 147 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0 10	7.55 7.55
20	7.55
30	7.55
40	7.55
50	7.56
60	7.56
70	7.56 7.55
80 90	7.42
100	5.56
110	5.36
120	5.30
130	5.36
140	5.46
150	5.54
160	5.45
170	5.44
180	5.36
190	5.26
200	5.21
210	5.03
220	4.91
230	4.88
240	4.69
250	4.66
260	4.50
270	4.55
280	4.50
290	4.42
300	4.38



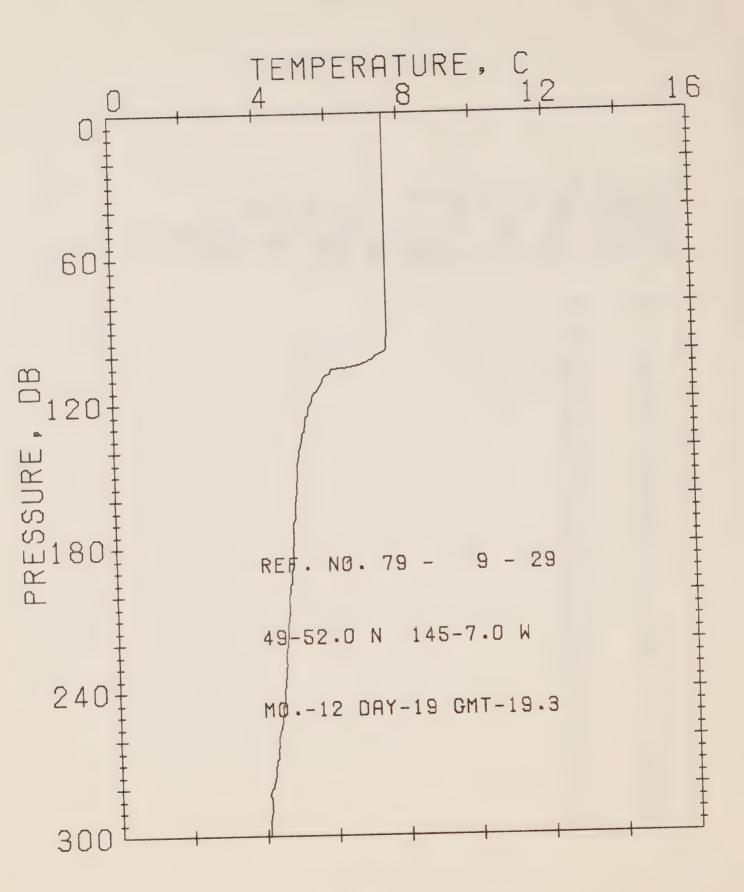
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 27 DATE 19/12/79
POSITION 50- .ON. 145- .OW GMT 16.0 STATION P
RESULTS OF STP CAST 290 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
U	7.55
10	7.55
20	7.55
30	7.55
50	7.56
75	7.55
100	5.56
125	5.32
150	5.54
175	5.40
200	5.21
225	4.92
250	4.66
300	4.38
400	4.02
500	3.87
600	3.69
800	3.30
1000	2.96
1200	2.73



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 28 DATE 19/12/79
POSITION 50- .0N, 145- .0W GMT 16.8 STATION P
RESULTS OF STP CAST 154 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.54
10	7.53
20	7.54
30	7.54
40	7.54
50	7.54
60	7.54
70	7.54
80	7.54
90	7.46
100	5.79
110	5.38
120	5.29
130	5.30
140	5.42
150	5.47
160	5.48
170	5.45
180	5.39
190	5.27
200	5.18
210	5.05
220	4.90
230	4.84
240	4.73
250	4.71
260	4.46
270	4.55
280	4.51
290	4.42
300	4.38



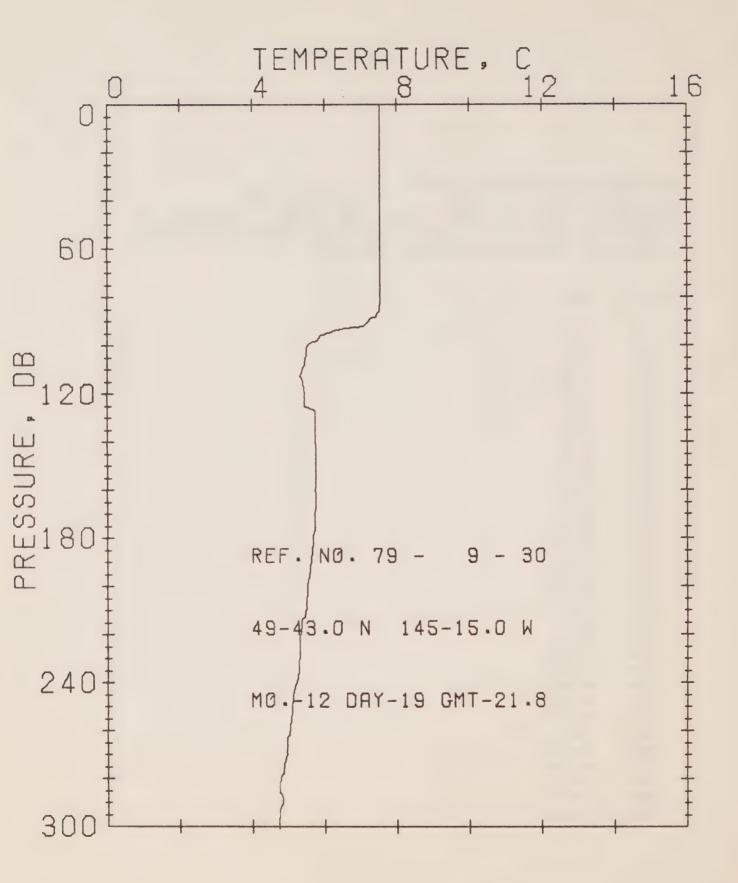
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 29 DATE 19/12/79

POSITION 49-52.0N. 145- 7.0W GMT 19.3 STATION W3

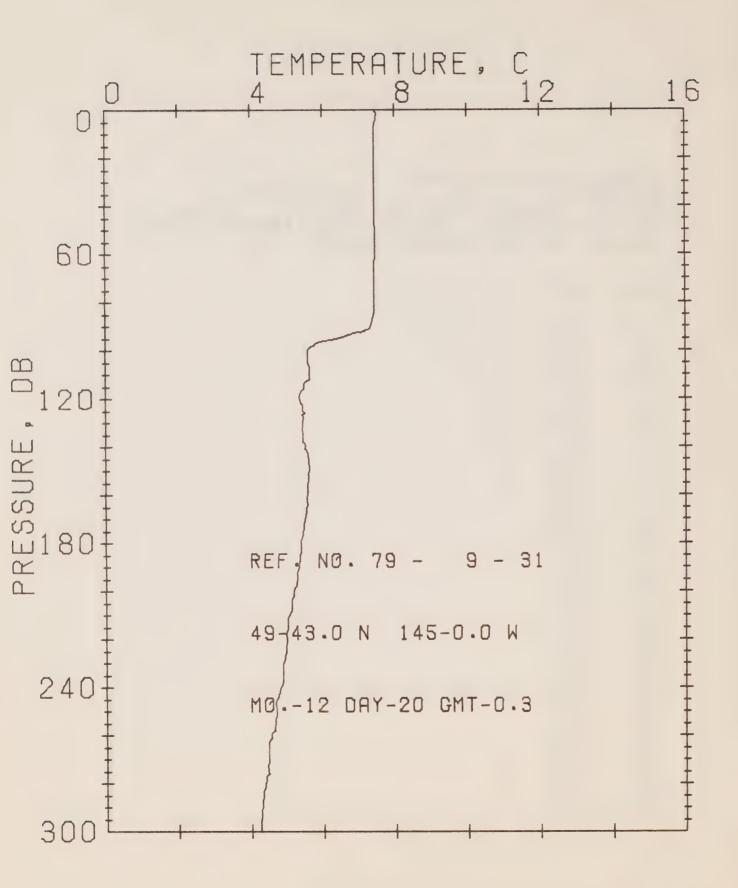
RESULTS OF STP CAST 152 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

TEMP
7.60
7.60
7.60
7.60
7.60
7.60
7.60
7.60
7.60
7.60
7.35
5.81
5.46
5.26
5.11
5.03
4.99
4.92
4.89
4.84
4.76
4.73
4.67
4.62
4.56
4.51
4.38
4.29
4.19
4.12
4.05



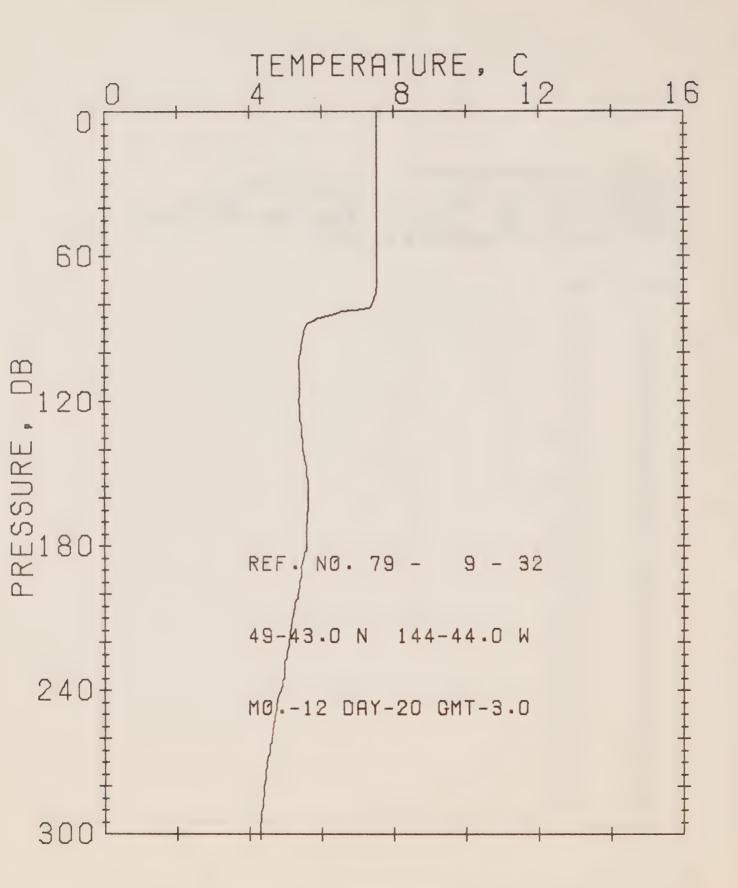
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 30 DATE 19/12/79
POSITION 49-43.0N, 145-15.0W GMT 21.8 STATION W4
RESULTS OF STP CAST 171 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	7.54
10	7.54
20	7.54
30	7.54
40	7.54
50	7.54
60	7.54
70	7.54
80	7.54
90	7.23
	5.54
100	
110	5.39
120	5.43
130	5.73 5.74
140	5 • 74
150	5.76
160	5.74
170	5.74
180	5.68
190	5.62
200	5.52
210	5.47
220	5.33
230	5.30
240	5.22
250	5.10
260	5.03
270	4.95
280	4.77
290	4.83
300	4.71



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 31 DATE 20/12/79
POSITION 49-43.0N, 145- .0W GMT .3 STATION C1
RESULTS OF STP CAST 181 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

TEMP
7.47
7.44
7.44
7.45
7.45
7.46
7.46
7.45
7.45
7.34
5.58
5.63
5.33
5.44
5.52
5.62
5.55
5.50
5.38
5.33
5.19
5.07
4.98
4.89
4.83
4.69
4.54
4.47
4.38
4.29
4.23



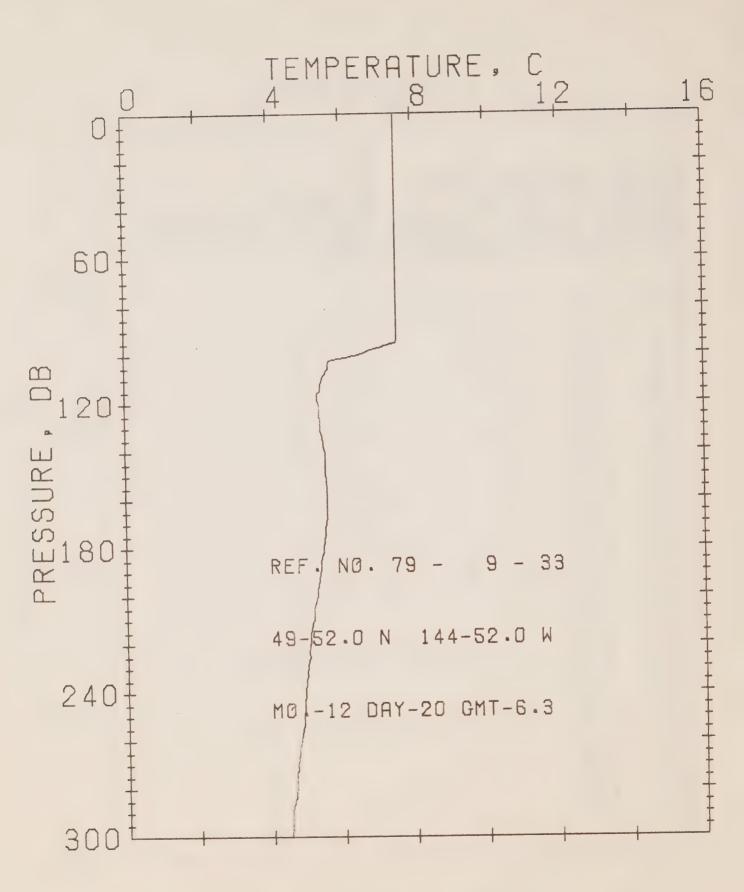
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 32 DATE 20/12/79

POSITION 49-43.0N, 144-44.0W GMT 3.0 STATION E4

RESULTS OF STP CAST 194 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
U	7.54
10	7.54
20	7.54
30	7.55
40	7.55
50	7.55
60	7.55
70	7.55
80	7.42
90	5.55
100	5.42
110	5.39
120	5.37
130	5.43
140	5.46
150	5.58
160	5.64
170	5.60
180	5.58
190	5.43
200	5.35
210	5.19
220	5.10
230	4.97
240	4.88
250	4.71
260	4.62
270	4.49
280	4.40
290	4.35
300	4.30



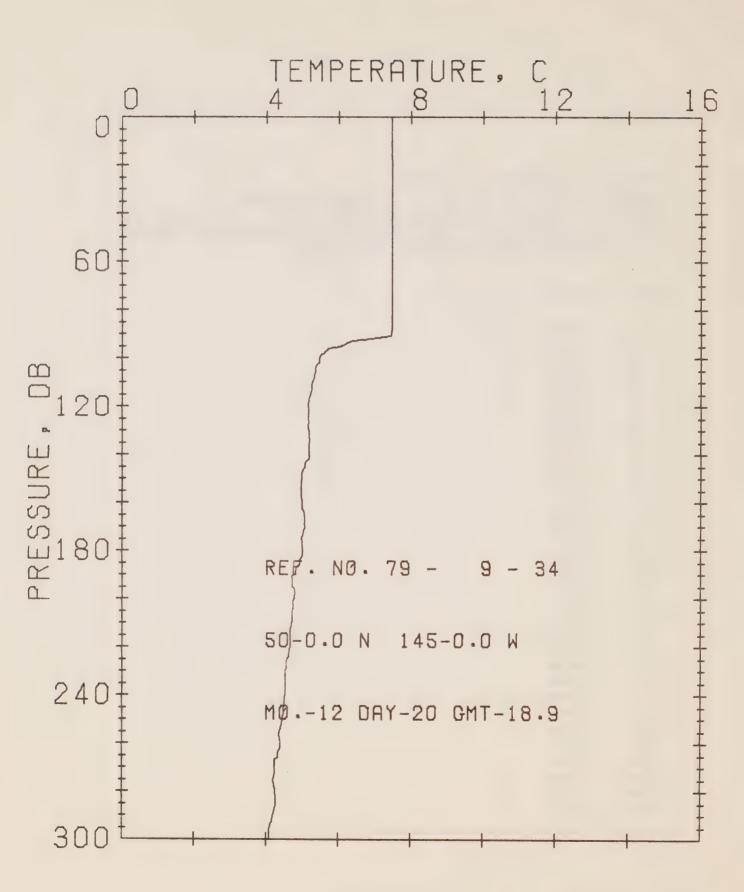
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 33 DATE 20/12/79

POSITION 49-52.0N. 144-52.0W GMT 6.3 STATION E3

RESULTS OF STP CAST 157 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	7.54
10	7.54
20	7.54
30	7.54
40	7.54
50	7.54
60	7.54
70	7.54
80	7.54
90	7.54
100	6.51
110	5.46
120	5.33
130	5.40
140	5.50
150	5.53
160	5.57
170	5.54
180	5.47
190	5.37
200	5.27
210	5.16
220	5.06
230	4.98
240	4.91
250	4.86
260	4.77
270	4.68
280	4.63
290	4.52
300	4.48



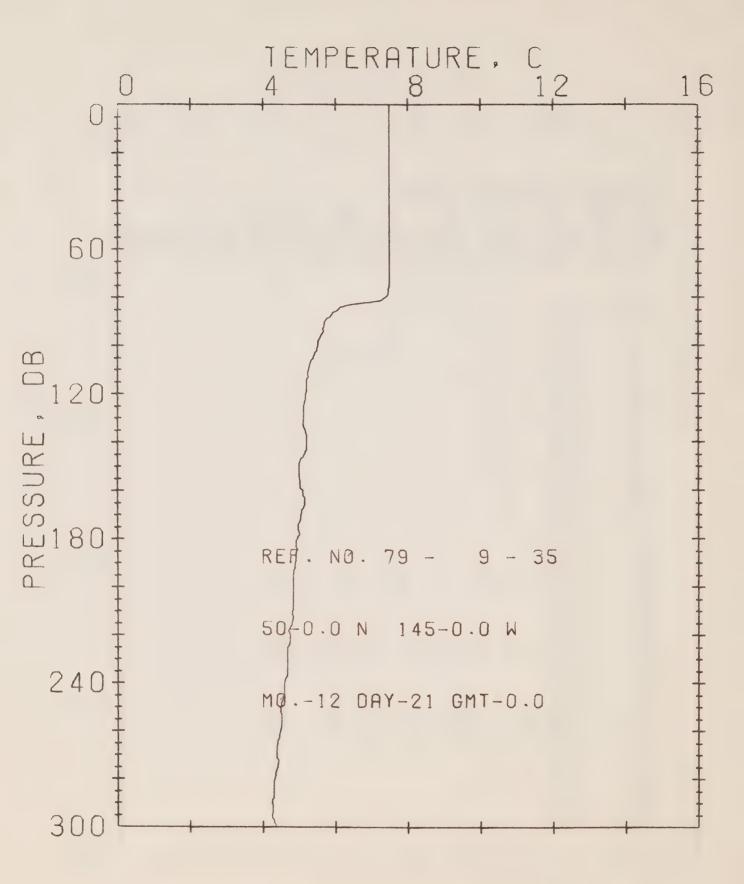
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 34 DATE 20/12/79

POSITION 50- .ON. 145- .OW GMT 18.9 STATION P

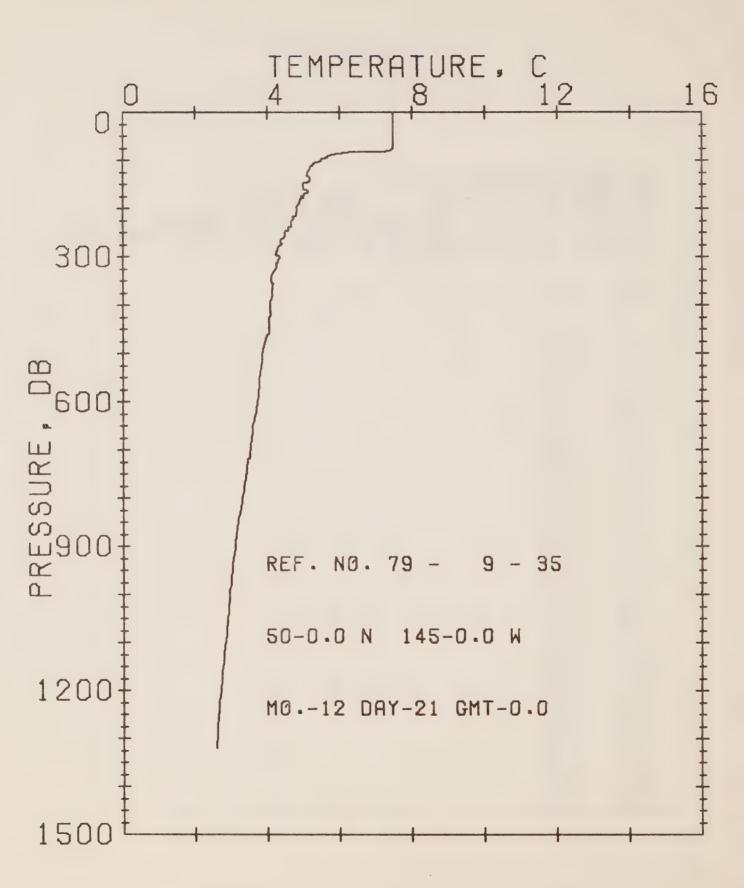
RESULTS OF STP CAST 192 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	7.47
10	7.47
20	7.48
30	7.48
40	7.48
50	7.48
60	7.48
70	7.48
80	7.49
90	7.47
100	5.46
110	5.28
120	5.15
130	5.16
140	5.18
150	4.99
160	4.98
170	5.06
180	5.00
190	4.81
200	4.77
210	4.71
220	4.66
230	4.54
240	4.53
250	4.46
260	4.40
270	4.23
280	4.25
290	4.19
300	4.07



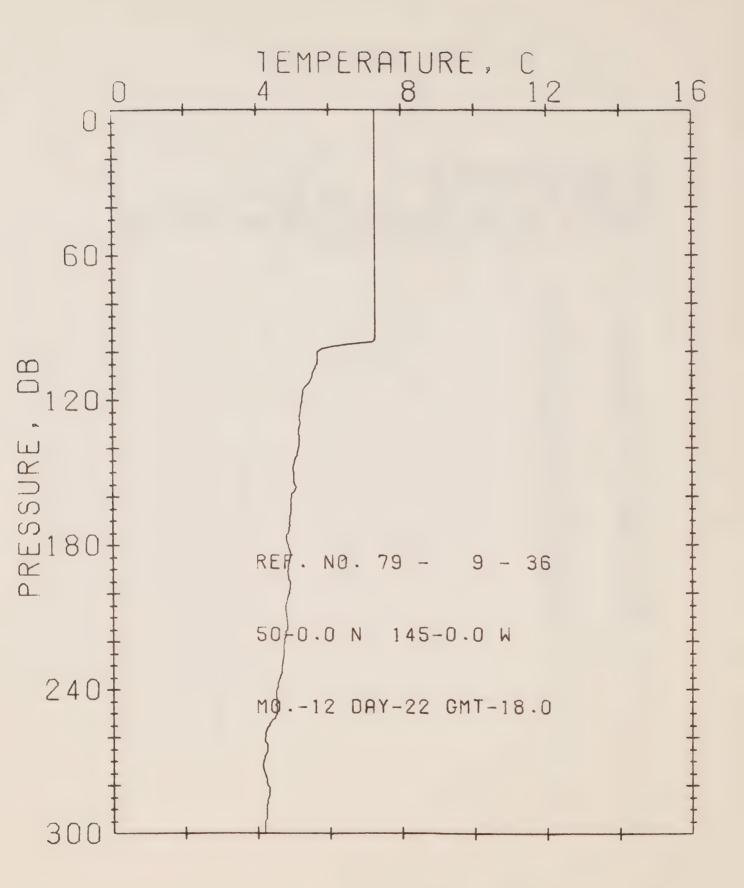
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 35 DATE 21/12/79
POSITION 50- .0N, 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

0 7.50 10 7.50 20 7.50 30 7.50	
20 7.50	
30 7.50	
40 7.50	
50 7.49	
60 7.48	
70 7.49	
80 7.37	
90 5.70	
100 5.51	
110 5.25	
120 5:17	
130 5.12	
140 5.19	
150 4.99	
160 5.09	
170 5.03	
180 4.94	
190 4.89	
200 4.84	
210 4.80	
220 4.74	
230 4.67	
240 4.58	
250 4.49	
260 4.47	
270 4.38	
280 4.32	
290 4.25	
300 4.35	



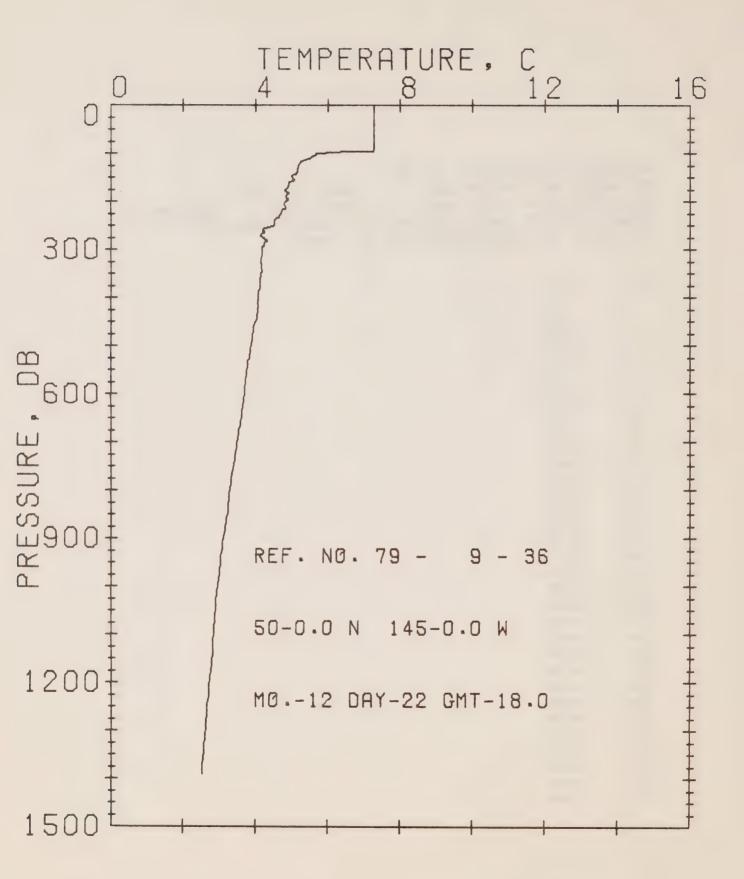
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 35 DATE 21/12/79
POSITION 50- .0N. 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 394 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
Ú	7.50
10	7.50
20	7.50
30	7.50
50	7.49
75	7.48
100	5.51
125	5.13
150	4.99
175	4.96
200	4.84
225	4.68
250	4.49
300	4.35
400	4.08
500	3.88
600	3.74
800	3.32
1000	2.95
1200	2.72



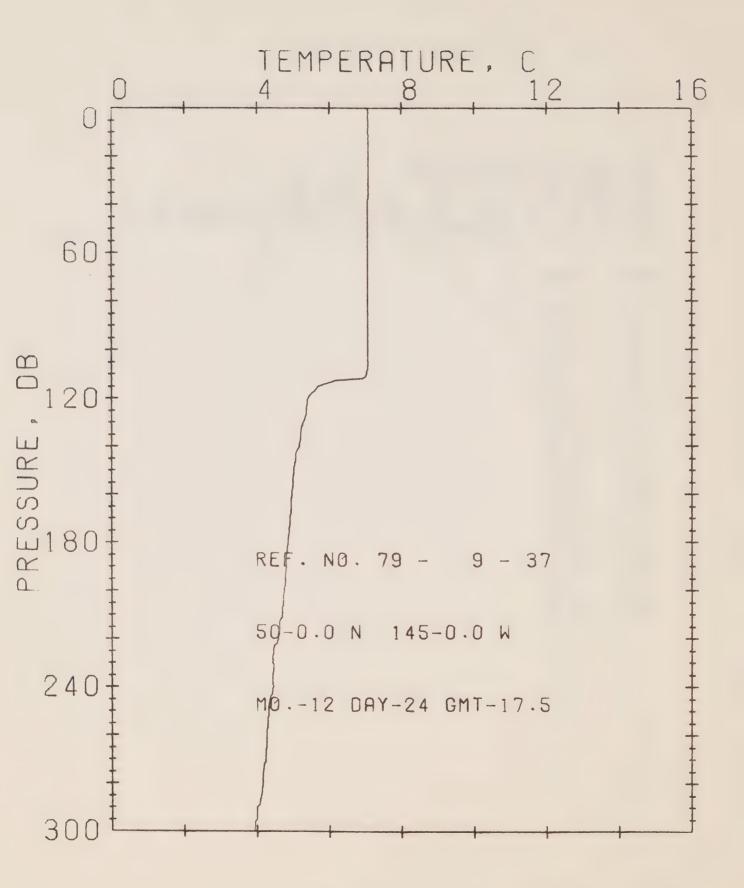
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 36 DATE 22/12/79
POSITION 50- .ON: 145- .OW GMT 18.0 STATION P
RESULTS OF STP CAST - 187 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
0	7.29
10	7.29
20	7.29
30	7.29
40	7.29
50	7.29
60	7.29
70	7.29
80	7.29
90	7.29
100	5.69
110	5.55
120	5.24
130	5.20
140	5.15
150	5.01
160	4.96
170	4.90
180	4.85
190	4.85
200	4.87
210	4.80
220	4.76
230	4.68
240	4.53
250	4.54
260	4.21
270	4.17
280	4.26
290	4.24
300	4.20



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 36 DATE 22/12/79
POSITION 50- .0N, 145- .0W GMT 18.0 STATION P
RESULTS OF STP CAST 379 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.29
10	7.29
20	7.29
30	7.29
50	7.29
75	7.29
100	5.69
125	5.19
150	5.01
175	4.85
200	4.87
225	4.73
250	4.54
300	4.20
400	4.08
500	3.89
600	3.70
800	3.31
1000	2.96
1200	2.75



OFFSHORE OCEANOGRAPHY GROUP

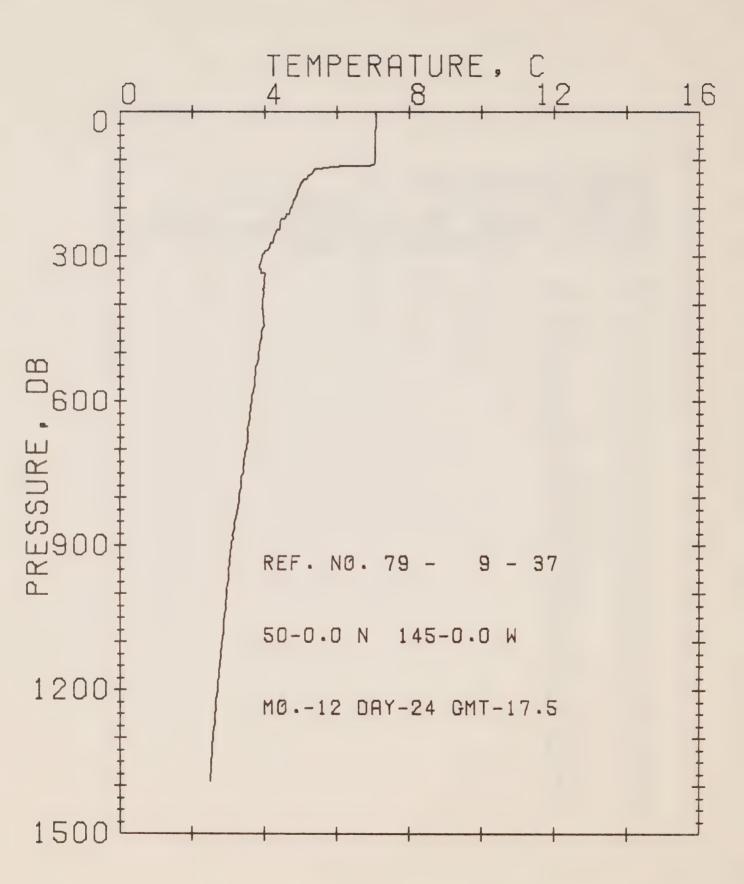
REFERENCE NO. 79- 9- 37

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 173 POINTS TAKEN FROM ANALOG TRACE

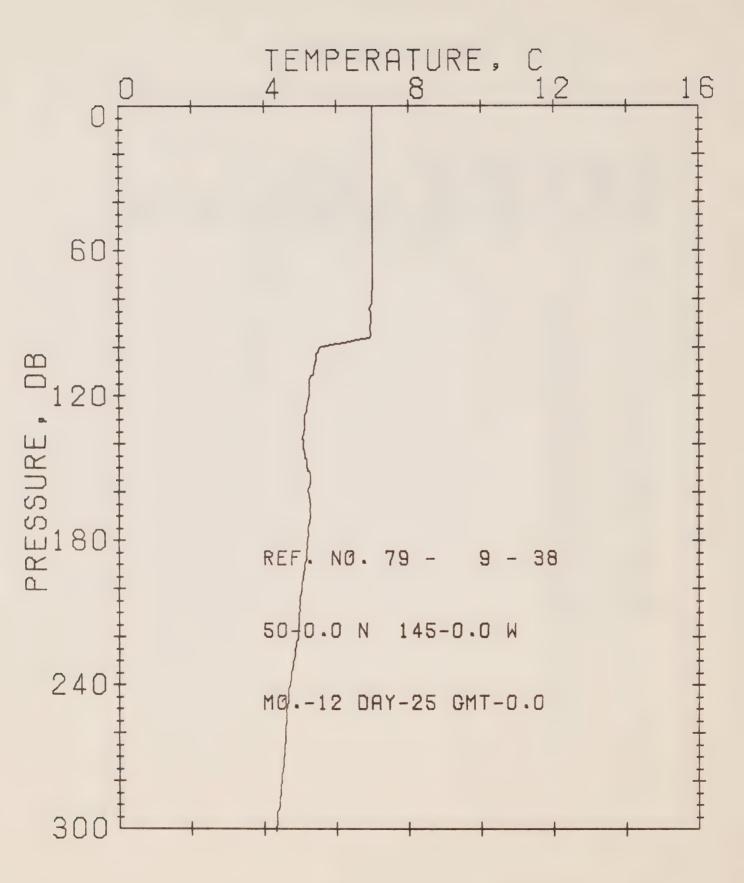
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.06
10	7.07
20	7.09
30	7.09
40	7.07
50	7.07
60	7.07
70	7.07 7.07
80	7.07
90	7.07
100	7.07
110	7.03
120	5.41
130	5.27
140	5.16
150	5.01
160	4.95
170	4.92
180	4.86
190	4.79
200	4.74
210	4.70
220	4.58
230	4.44
240	4.45
250	4.32
260	4.27
270	4.23
280	4.17
290	4.01
300	3.92



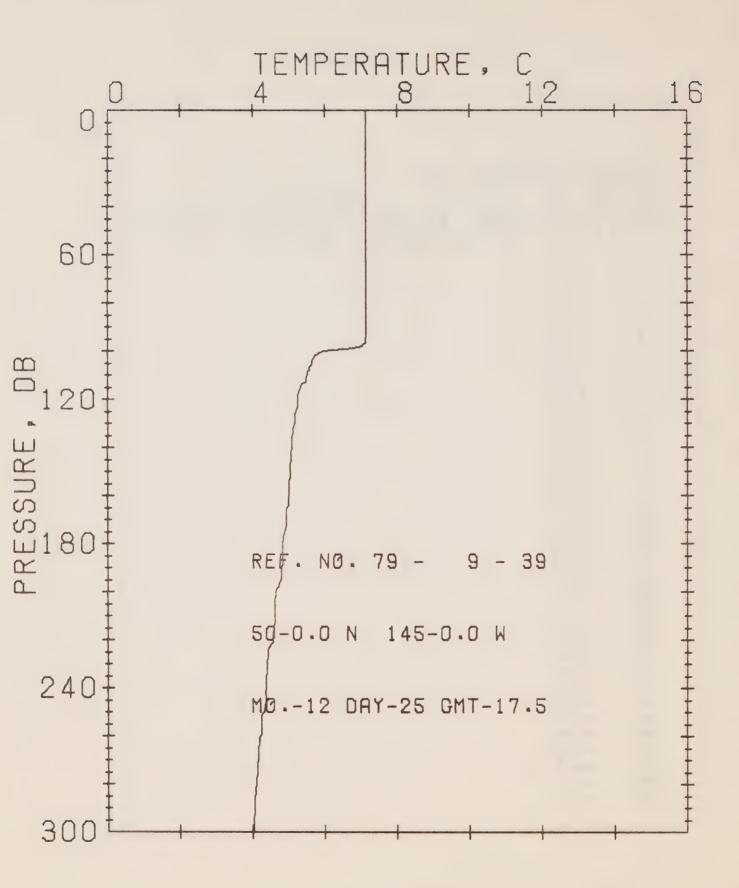
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 37 DATE 24/12/79
POSITION 50- .ON: 145- .OW GMT 17.5 STATION P
RESULTS OF STP CAST 372 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
PRESS  0 10 20 30 50 75 100 125 150 175 200 225 250 300 400 500 600	7.06 7.07 7.09 7.09 7.07 7.07 7.07 5.37 5.01 4.87 4.74 4.46 4.32 3.92 3.95 3.85 3.65
800 1000 1200	3.31 2.97 2.72



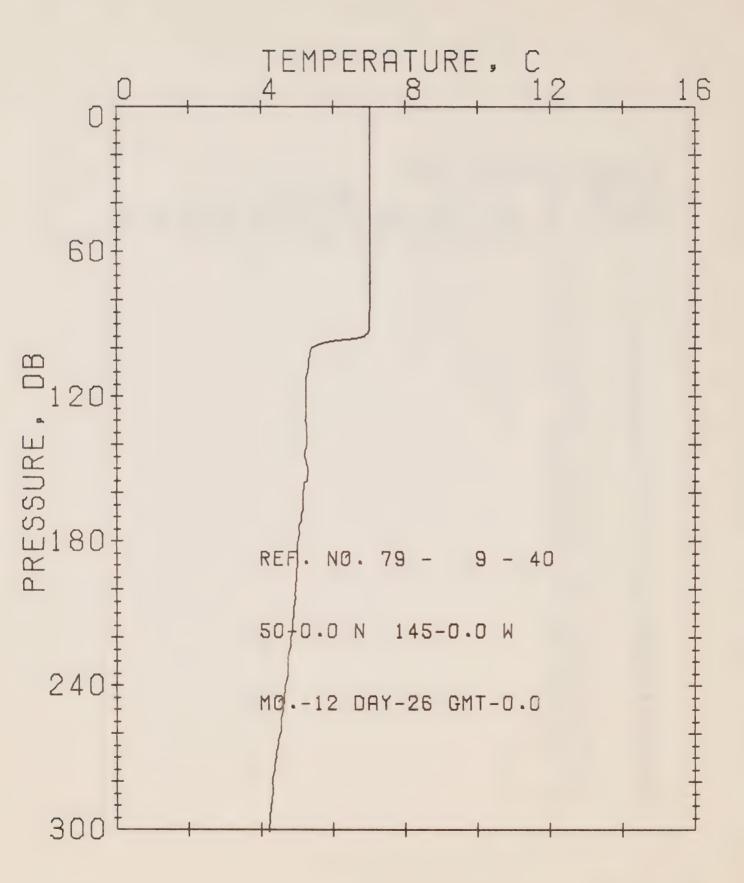
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 38 DATE 25/12/79
POSITION 50- .ON, 145- .OW GMT .O STATION P
RESULTS OF STP CAST 173 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0 10 20 30 40 50 60 70 80	7.01 7.01 7.01 7.01 7.01 7.01 7.01 7.00 6.99 6.95
100	5.55
110	5.37
120	5.25
130	5.13
140	5.07
150	5.19
160	5.21
170	5.27
180	5.19
190	5.13
200	5.04
210	4.97
220 230	4.93
240 250	4.72
260	4.59
270	4.55
280	4.47
290 300	4.42



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 39 DATE 25/12/79
POSITION 50- .ON: 145- .OW GMT 17.5 STATION P
RESULTS OF STP CAST 140 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
0	7.15
10	7.15
20	7.15
30	7.14
40	7.14
50	7.14
60	7.14
70	7.14
80	7.14
90	7.14
100	5.95
110	5.51
120	5.25
130	5.16
140	5.09
150	5.05
160	5.00
170	4.94
180	4.84
190	4.81
200	4.65
210	4.61
220	4.56
230	4.41
240	4.37
250	4.33
260	4.22
270	4.16
280	4.11
290	4.06
300	4.02



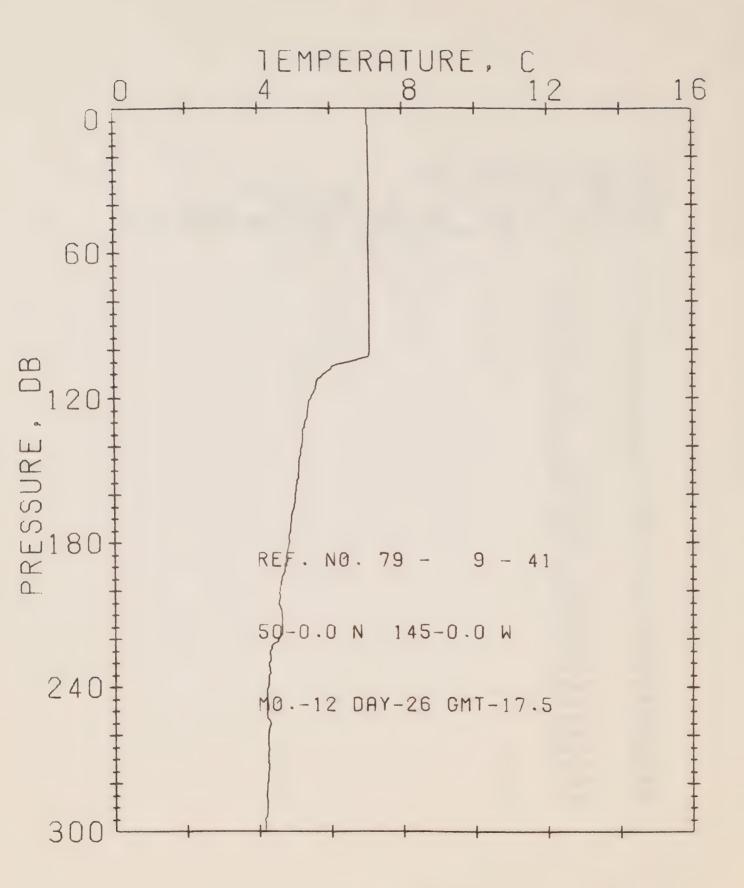
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 40 DATE 26/12/79

POSITION 50- .ON: 145- .OW GMT .O STATION P

RESULTS OF STP CAST 160 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
0	7.05
10	7.05
20	7.05
30	7.05
40	7.05
50	7.05
60	7.05
70	7.05
60	7.04
90	7.02
100	5.42
110	5.32
120	5.25
130	5.23
140	5.27
150	5.31
160	5.18
170	5.12
180	5.03
190	5.00
200	4.95
210	4.91
220	4.84
230	4.74
240	4.69
250	4.60
260	4.53 4.42
270 280	4.33
290	4.27
300	4.22
300	4022



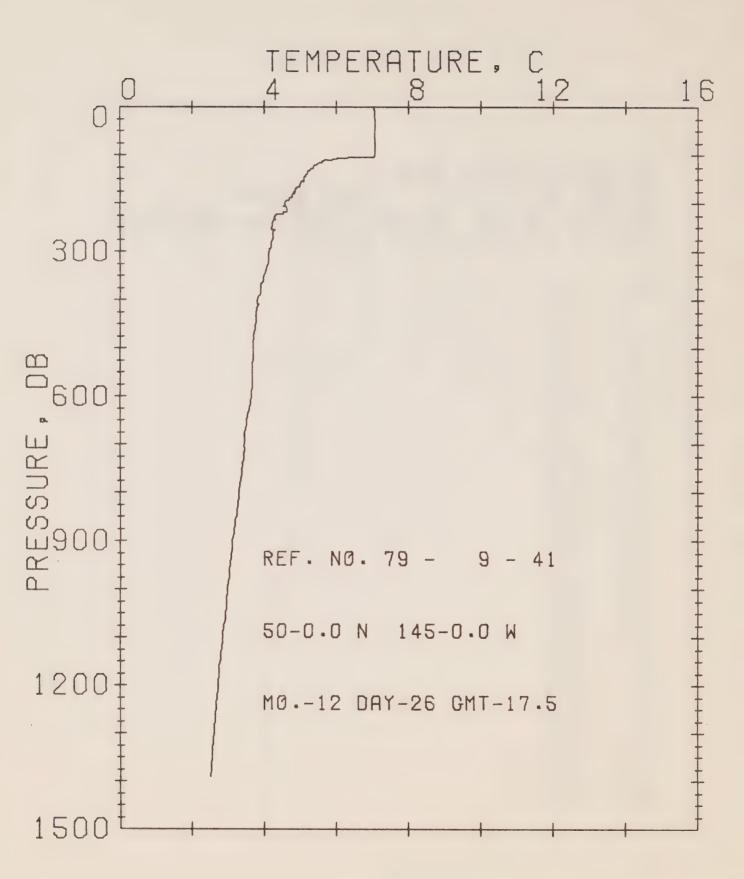
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 41 DATE 26/12/79

POSITION 50- .0N. 145- .0W GMT 17.5 STATION P

RESULTS OF STP CAST 156 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
O	7.03
10	7.06
20	7.07
30	7.08
40	7.08
50	7.07
60	7.07
70	7.08
80	7.08
90	7.08
100	7.08
110	5.80
120	5.46
130	5.30
140	5.21
150	5.11
160	5.01
170	4.91
180	4.84
190	4.73
200	4.57
210	4.63
220	4.54
230	4.28
240	4.23
250	4.21
260	4.24
270	4.24
280	4.21
290	4.21
300	4.14



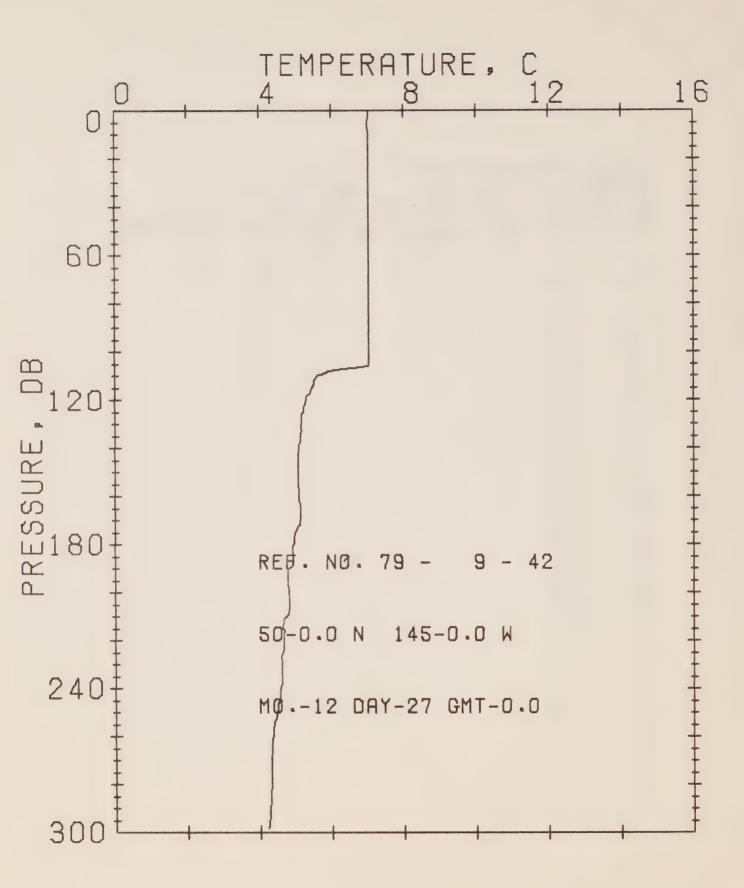
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 41 DATE 26/12/79

POSITION 50- .ON. 145- .OW GMT 17.5 STATION P

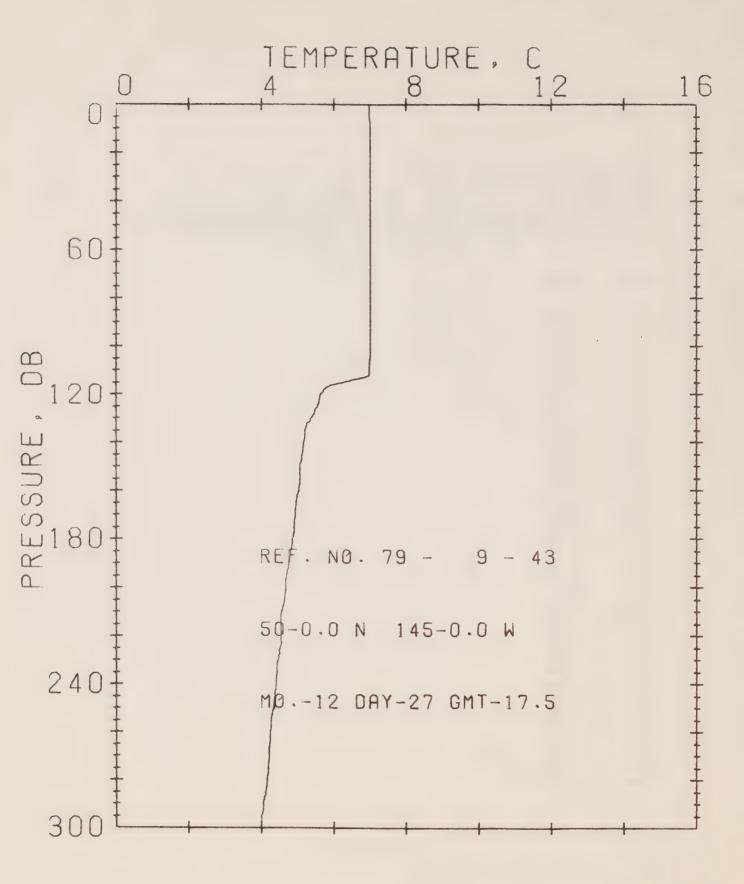
RESULTS OF STP CAST 347 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	7.03
10	7.06
20	7.07
30	7.08
50	7.07
75	7.08
100	7.08
125	5.38
150	5.11
175	4.87
200	4.57
225	4.30
250	4.21
300	4.14
400	3.82
500	3.72
600	3.65
800	3.31
1000	2.99
1200	2.73



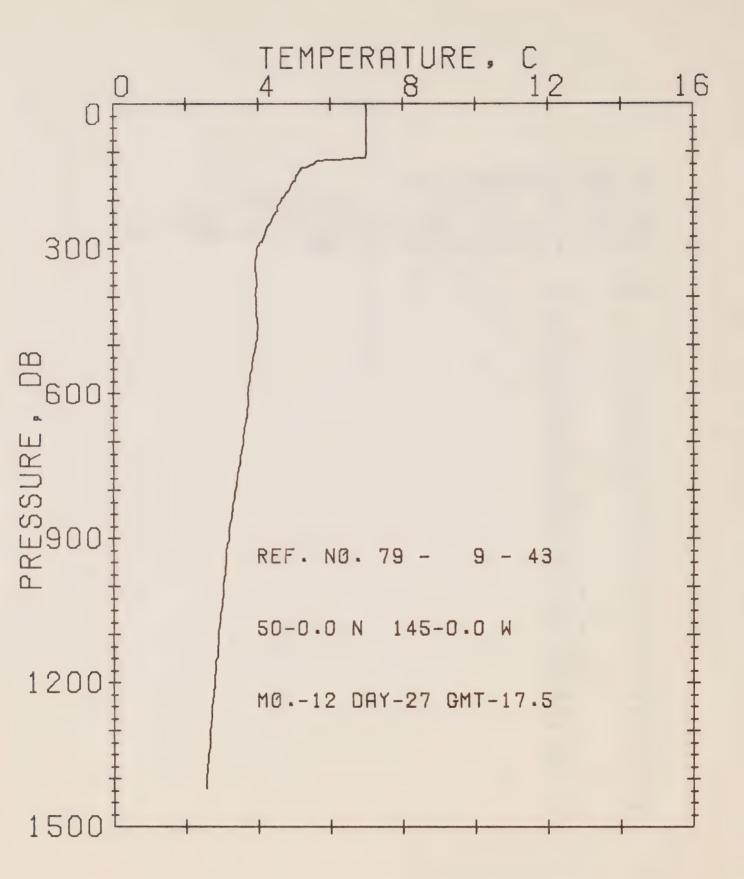
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 42 DATE 27/12/79
POSITION 50- .0N, 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.03
10	7.03
20	7.04
30	7.04
40	7.04
50	7.04
60	7.04
70	7.04
80	7.04
90	7.04
100	7.04
110	5.63
120	5.30
130	5.16
140	5.09
150	5.07
160	5.10
170	5.14
180	4.95
190	4.85
200	4.81
210	4.75
220	4.68
230	4.60
240	4.59
250	4.49
260	4.37
270	4.33
280	4.31
290	4.28



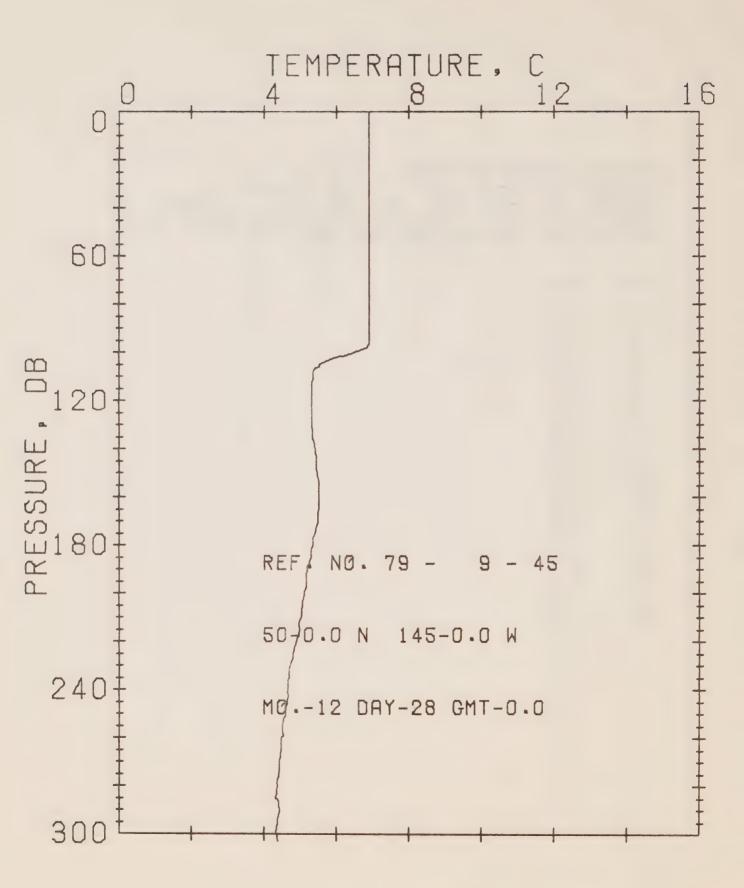
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 43 DATE 27/12/79
POSITION 50- .ON: 145- .OW GMT 17.5 STATION P
RESULTS OF STP CAST 128 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
Ü	6.98
10	7.00
20	7.00
30	7.00
40	7:00
50	7.00
60	7.00
70	7.00
80	7.00
90	7.00
100	7.00
110	0.99
120	5.64
130	5.37
140	5.16
150	5.08
160	5.03
170	4.93
180	4.85
190	4.76
200	4.67
210	4.56
220	4.53
230	4.45
240	4.41
250	4.34
260	4.25
270	4.22
280	4.17
290	4.06
300	3.98



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 43 DATE 27/12/79
POSITION 50- .0N, 145- .0W GMT 17.5 STATION P
RESULTS OF STP CAST 329 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.98
10	7.00
20	7.00
30	7.00
5ú	7.00
75	7.00
100	7.00
125	5.55
150	5.08
175	4.91
200	4.67
225	4.51
250	4.34
300	3.98
400	3.94
500	3.96
600	3.72
800	3.38
1000	3.05
1200	2.80
1200	2,00



OFFSHORE OCEANOGRAPHY GROUP

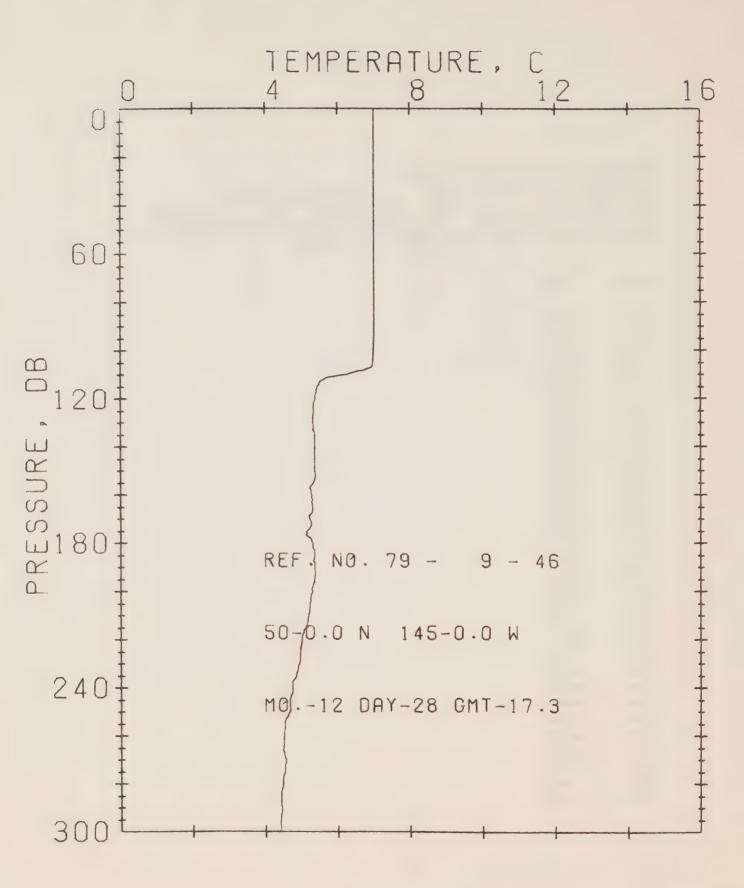
REFERENCE NO. 79- 9- 45

POSITION 50- .0N, 145- .0W GMT .0 STATION P

RESULTS OF STP CAST 161 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
U	6.90
10	6.90
20	6.90
30	6.90
40	6.90
50	6.90
60	6.90
70	6.91
80	6.91
90	6.91
100	0.51
110	5.37
120	5.30
130	5.31
140	5.40
150	5.46
160	5.51
170	5.48
180	5.36
190	5.19
200	5.13
210	5.03
220	4.89
230	4.72
240	4.67
250	4.58
260	4.49
270	4.44
280	4.37
290	4.42
300	4.33



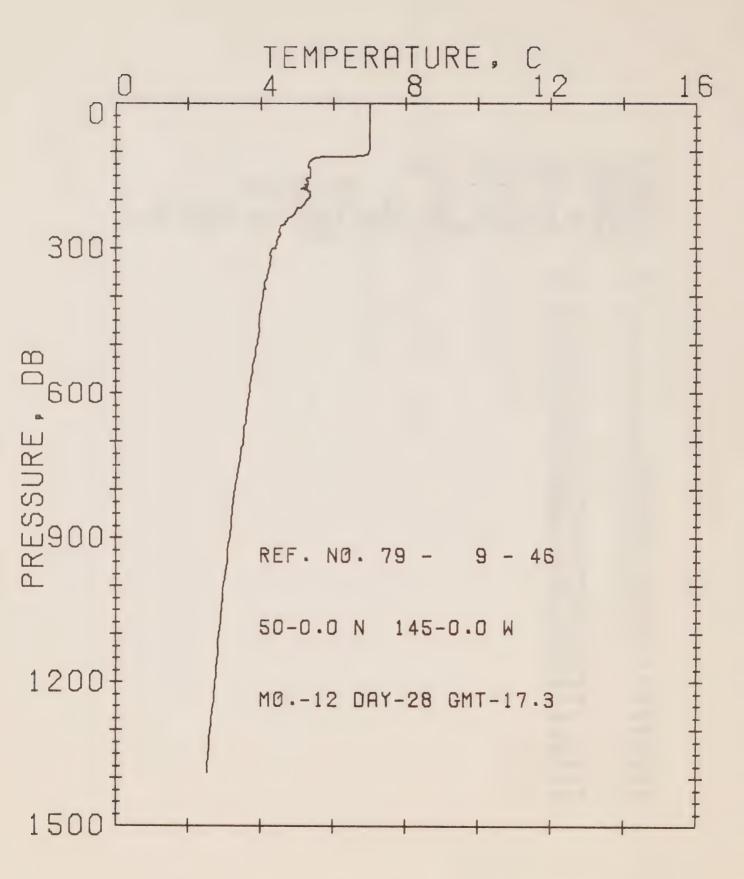
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 46 DATE 28/12/79

POSITION 50- .0N. 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 180 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	7.01
10	7.00
20	7.00
30	7.01
40	7.01
50	7.01 7.01
60	7.01
70	7.01
80	7.00
90	7.00
100	6.99
110	6.25
120	5.38
130	5.32
140	5.35
150	5.37
160	5.29
170	5.22
180	5.31
190	5.37 5.30
200	5.30
210	5.20
220	5.01
230	4.94
240	4.75
250	4.66
260	4.52
270	4.55
280	4.47
290	4.45
300	4.37



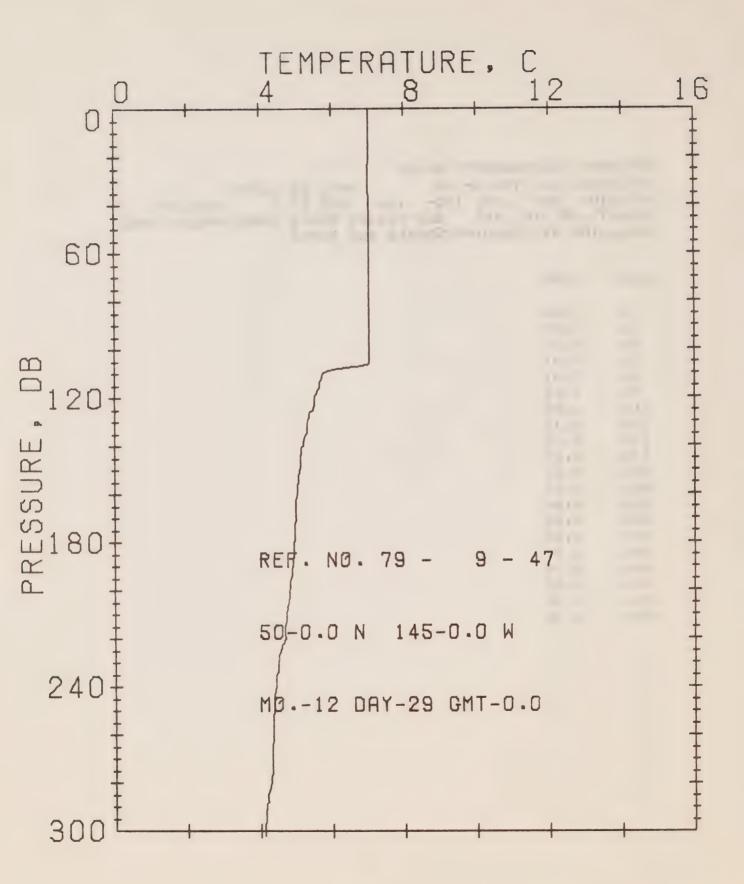
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 46 DATE 28/12/79

POSITION 50- .ON: 145- .OW GMT 17.3 STATION P

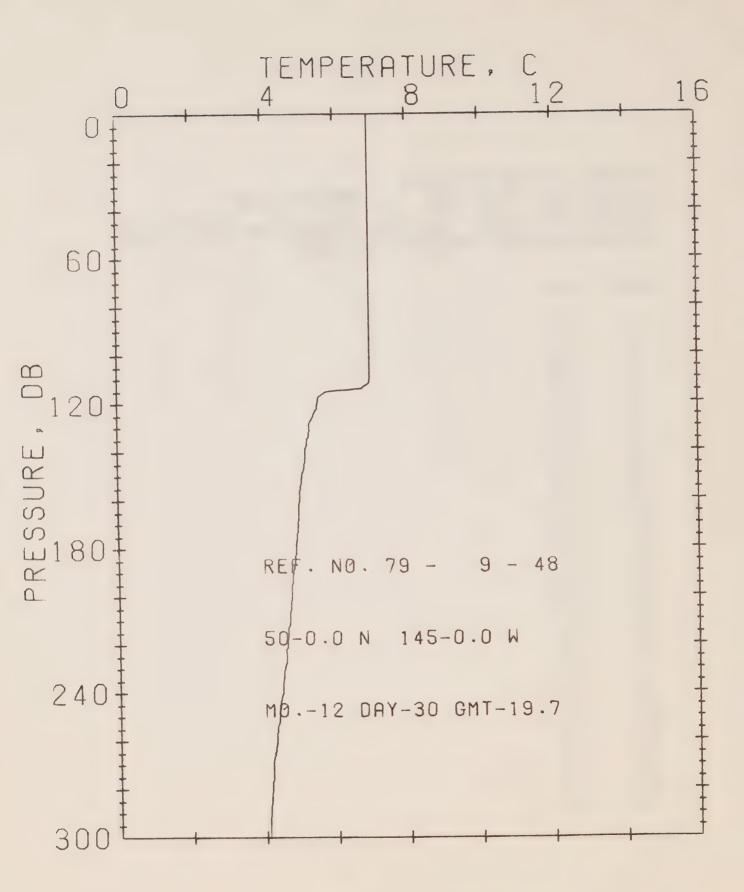
RESULTS OF STP CAST 328 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED:PRESSURES ARE INPUT

PRESS	TEMP
0	7.01
10	7.00
20	7.00
30	7.01
50	7.01
75	7.01
100	6.99
125	5.33
150	5.37
175	5.15
200	5.30
225	4.97
250	4.66
300	4.37
400	4.08
500	3.91
600	3.70
800	3.30
1000	2.98
1200	2.76



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 47 DATE 29/12/79
POSITION 50- .ON. 145- .OW GMT .O STATION P
RESULTS OF STP CAST 148 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	7.04
10	7.04
20	7.03
30	7.02
40	7.03
50	7.03
60	7.03
76	7.04
80	7.04
90	7.04
100	7.04
110	5.77
120	. 5.51
130	5.33
140	5.20
150	5.10
160	5.03
170	4.98
180	4.94
190	4.91
200	4.81
210	4.73
220	4.70
230	4.49
240	4.42
250	4.37
260	4.35
270	4.32
280	4.30
290	4.16
300	4.11



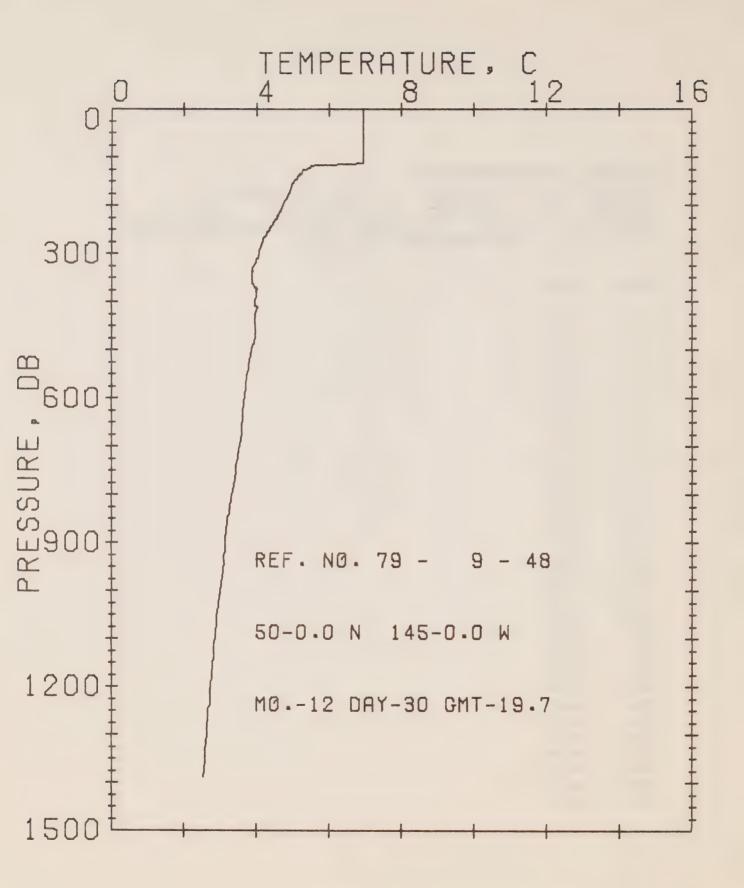
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 48 DATE 30/12/79

POSITION 50- .0N. 145- .0W GMT 19.7 STATION P

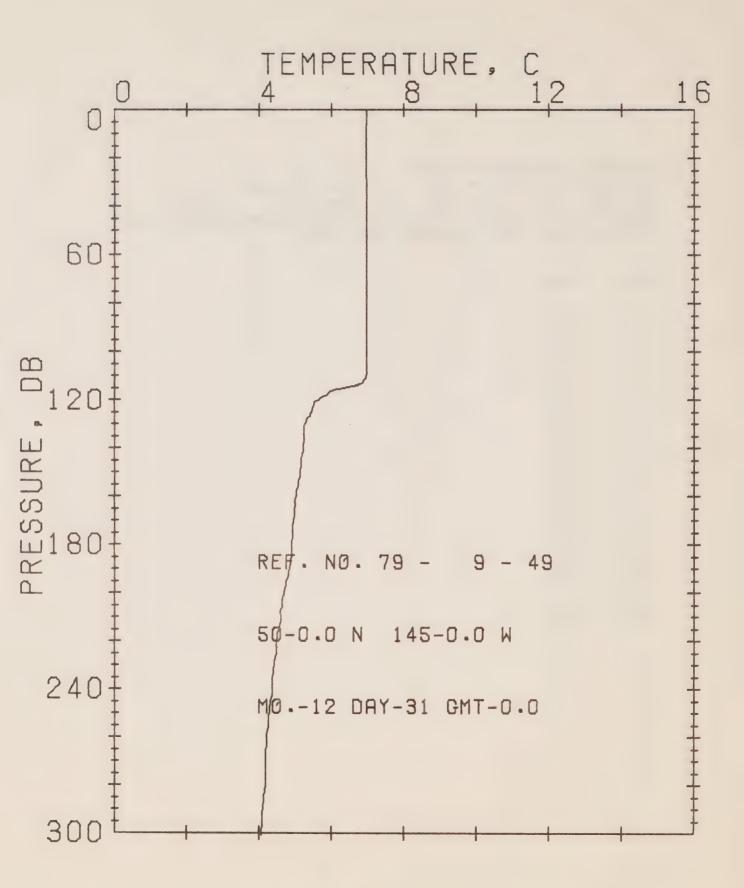
RESULTS OF STP CAST 144 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	6.97
10	6.97
20	6.97
30	6.97
40	6.97
50	6.97
60	6.97
70	6.97
80	6.97
90	6.97
100	0.97
110	6.97
120	5.50
130	5.26
140	5.15
150	5.06
160	4.98
170	4.93
180	4.88
190	4.80
200	4.76
210	4.69
220	4.62
230	4.54
240	4.47
250	4.37
260	4.30
270	4.19
280	4.16
290	4.11
300	4.07



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 48 DATE 30/12/79
POSITION 50- .0N, 145- .0W GMT 19.7 STATION P
RESULTS OF STP CAST 318 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
U	6.97
10	6.97
20	6.97
30	6.97
50	6.97
75	6.97
100	6.97
125	5.39
150	5.06
175	4.91
200	4.76
225	4.58
250	4.37
300	4.07
400	3.96
500	3.87
600	3.68
800	3.34
1000	3.01
1200	2.75



OFFSHORE OCEANOGRAPHY GROUP

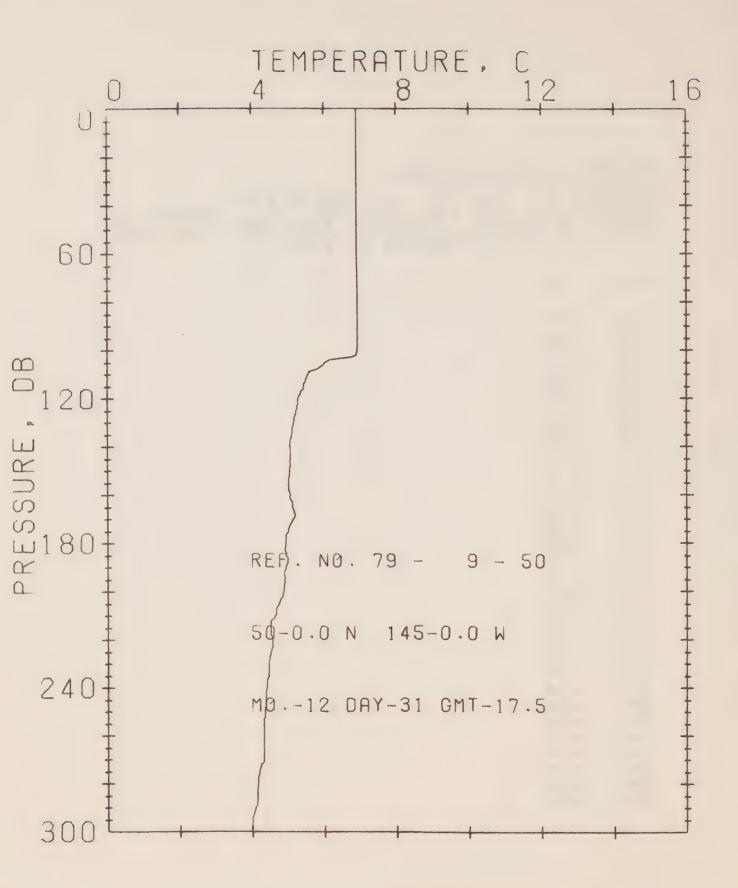
REFERENCE NO. 79- 9- 49

POSITION 50- .0N, 145- .0W GMT .0 STATION P

RESULTS OF STP CAST 144 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.98
10	6.97
20	6.97
30	6.98
40	6.98
50	6.98
60	6.98
70	6.98
80	6.98
90	6.98
100	6.98
110	6.97
120	5.68
130	5.28
140	5.22
150	5.15
160	5.04
170	4.97
180	4.92
190	4.85
200	4.70
210	4.60
220	4.49
230	4.42
240	4.38
250	4.30
260	4.21
270	4.19
280	4.18
290	4.10
300	4.06



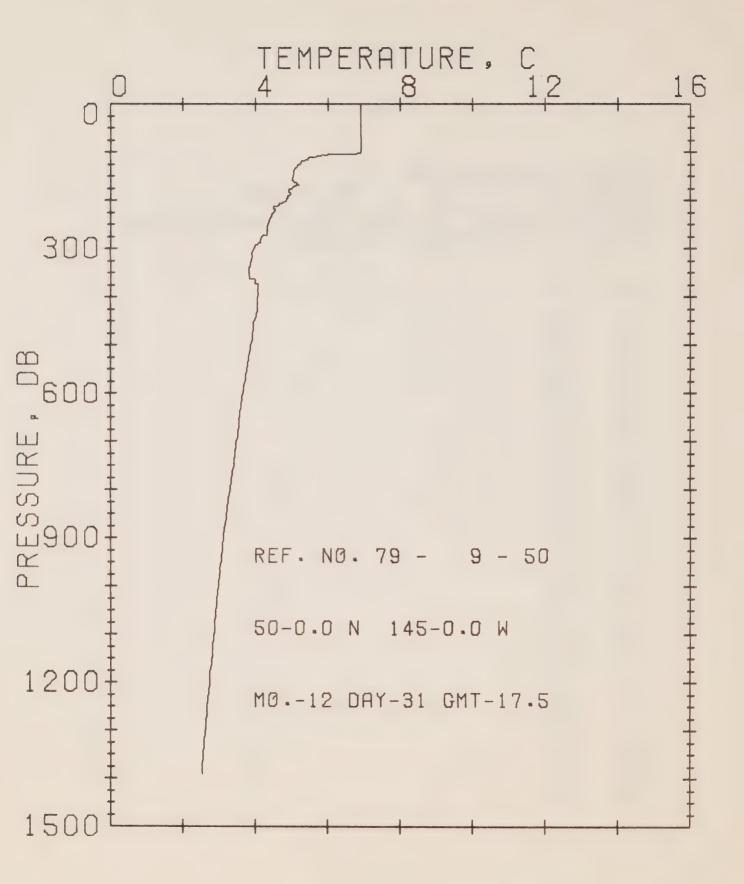
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 50 DATE 31/12/79

POSITION 50- .ON: 145- .OW GMT 17.5 STATION P

RESULTS OF STP CAST 175 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED:PRESSURES ARE INPUT

PRESS	TEMP
0	6.00
0	6.92
10	6.92
20	6.92
30	6.92
40	6.92
50	6.92
60	6.92
70	6.93
80	6.93
90	6.93
100	6.93
110	5.56
120	5.28
130	5.16
140	5.05
150	5.05
160	5.06
170	5.17
180	4.93
190	4.93
200	4.87
210	4.64
220	4.55
230	4.45
240	4.40
250	4.35
260	4.32
270	4.31
280	4.16
290	4.07
300	3.97



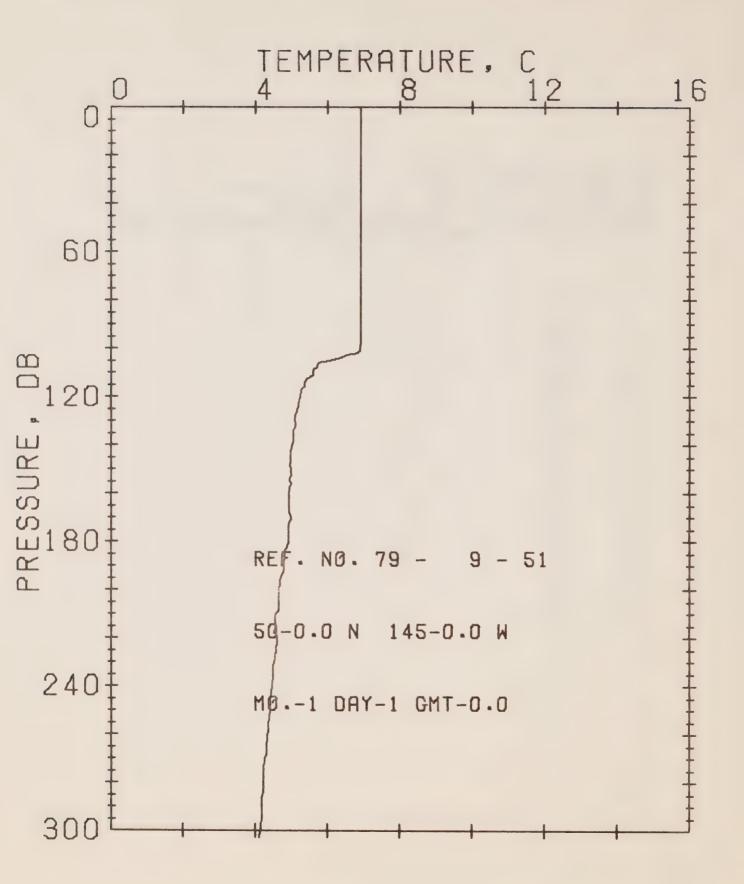
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 50 DATE 31/12/79

POSITION 50- .0N, 145- .0W GMT 17.5 STATION P

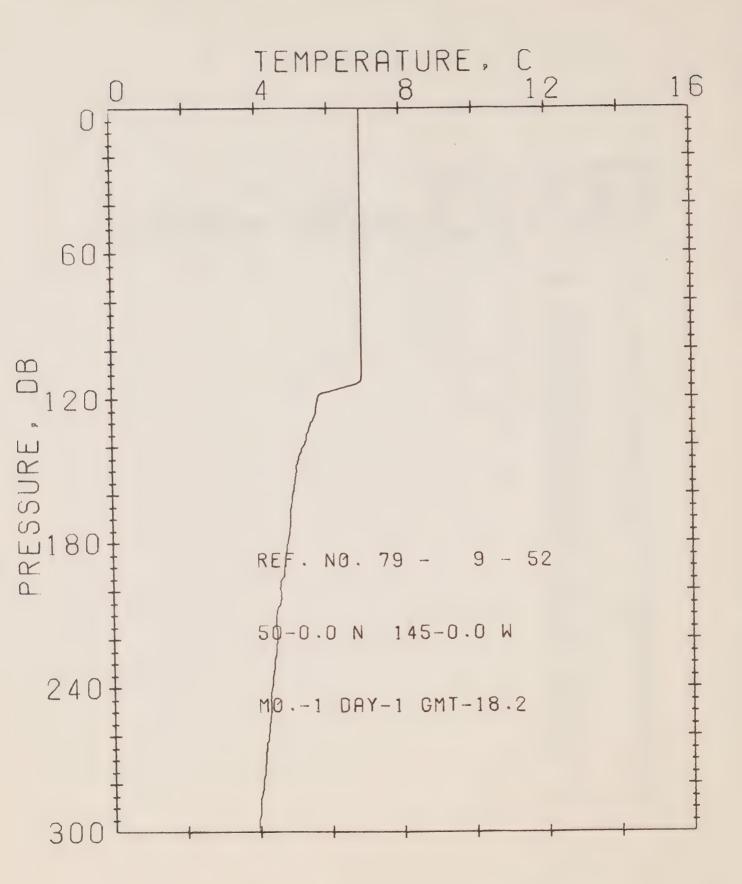
RESULTS OF STP CAST 355 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
υ	6.92
10	6.92
20	6.92
30	6.92
50	6.92
75	6.93
100	0.93
125	5.22
150	5.05
175	5.00
200	4.87
225	4.50
250	4.35
300	3.97
400	4.07
500	3.89
600	3.66
800	3.30
1000	2.98
1200	2.75



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 51 DATE 1/ 1/80
POSITION 50- .0N, 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 163 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.94
10	6.94
20	6.94
30	6.94
40	6.94
50	6.94
60	6.94
70	6.94
80	6.94
90	6.94
100	6.92
110	5.59
120	5.24
130	5.10
140	5.04
150	4.98
160	4.93
170	4.99
180	4.93
190	4.81
200	4.68
210	4.59
220	4.61
230	4.53
240	4.48
250	4.43
260	4.35
270	4.28
280	4.24
290	4.19
300	4.13



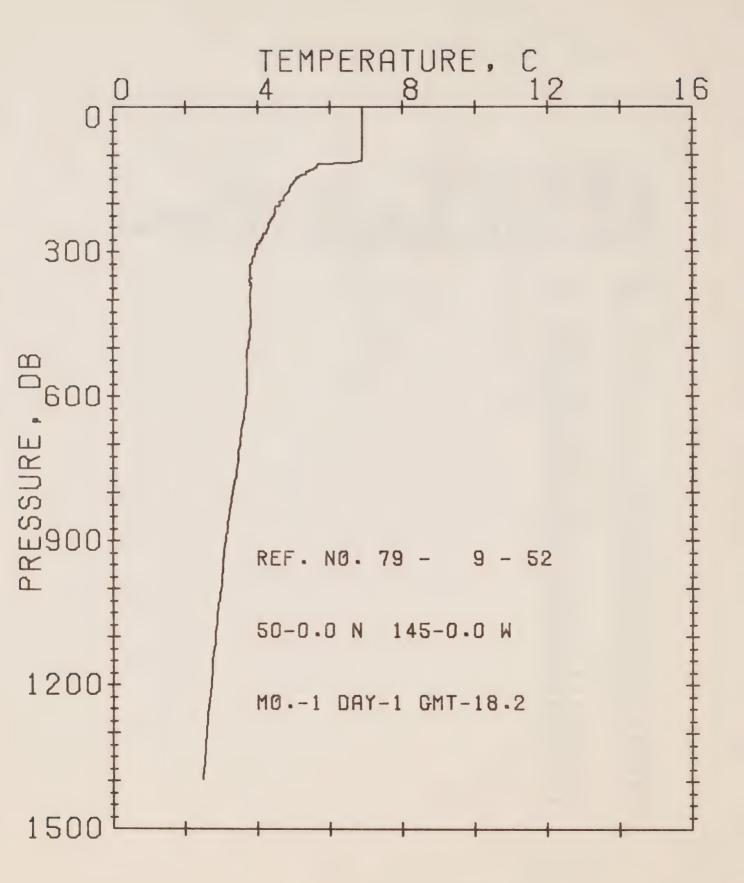
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 52 DATE 1/ 1/80

POSITION 50- .ON. 145- .OW GMT 18.2 STATION P

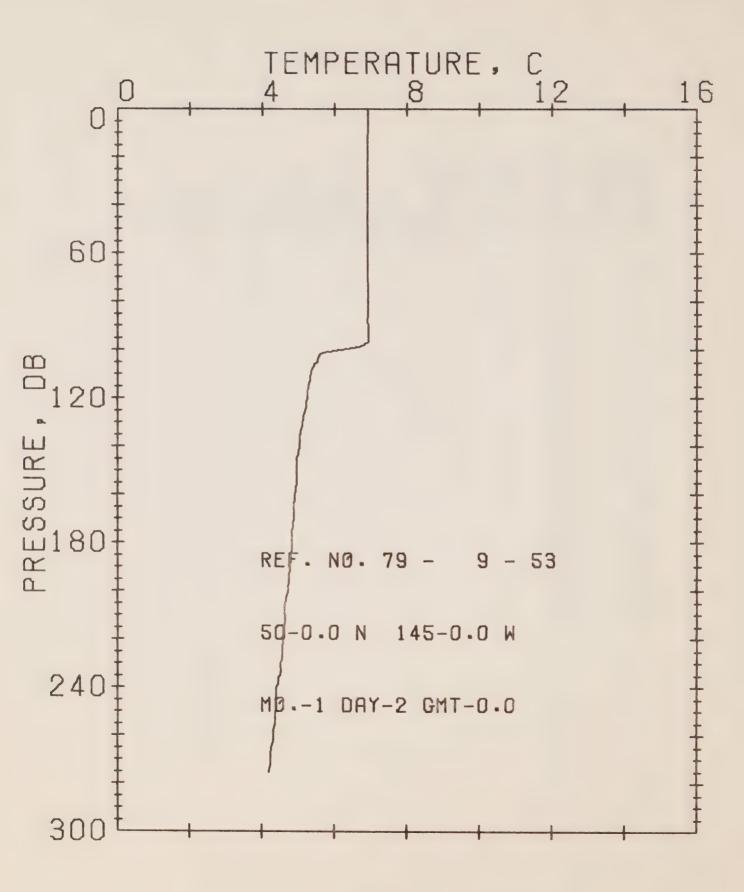
RESULTS OF STP CAST 175 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	6.91
10	6.91
20	6.91
30	6.91
40	6.91
50	6.91
<b>7</b> 0	6.91
80	6.91
90 100	6.91
110	0.91 5.68
130	5.50
140	5.28
150	5.10
160	4.98
170	4.91
180	4.83
190	4.73
200	4.60
210	4.48
220	4.51
230	4.44
240 250	4.34
260	4.25
270	4.17
280	4.08
290	4.01
300	3.94



OFFSHURE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 52 DATE 1/ 1/80
POSITION 50- .ON. 145- .UW GMT 18.2 STATION P
RESULTS OF STP CAST 405 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	6.91
10	6.91
20	6.91
30	6.91
50	6.91
75	6.91
100	6.91
125	5.62
150	5.10
175	4.88
200	4.60
225	4.48
250	4.31
300	3.94
400	3.80
500	3.75
600	3.69
800	3.32
1000	2.99
1200	2.71



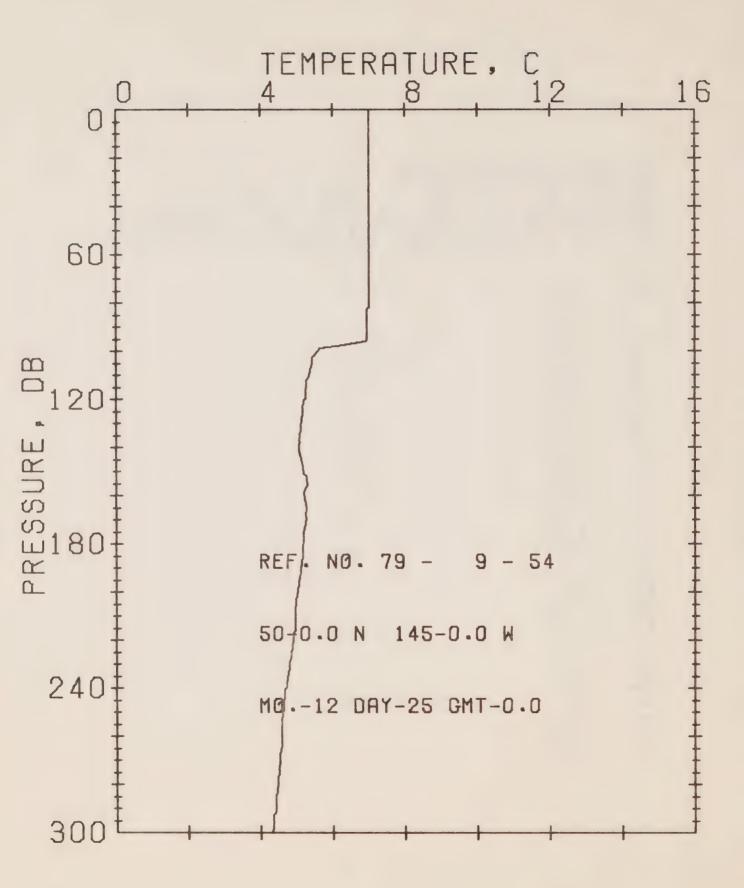
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 53 DATE 2/ 1/80

POSITION 50- .0N. 145- .0W GMT .0 STATION P

RESULTS OF STP CAST 151 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	6.91
10	6.93
20	6.92
30	6.92
40	6.92
50	6.92
60	6.92
70	6.92
80	6.93
90	6.93
100	6.20
110	5.35
120	5.25
130	5.13
140	5.03
150	4.96
160	4.91
170	4.87
180	4.82
190	4.78
200	4.72
210	4.63
220	4.60
230	4.52
240	4.41
250	4.38
260	4.32
270	4.24



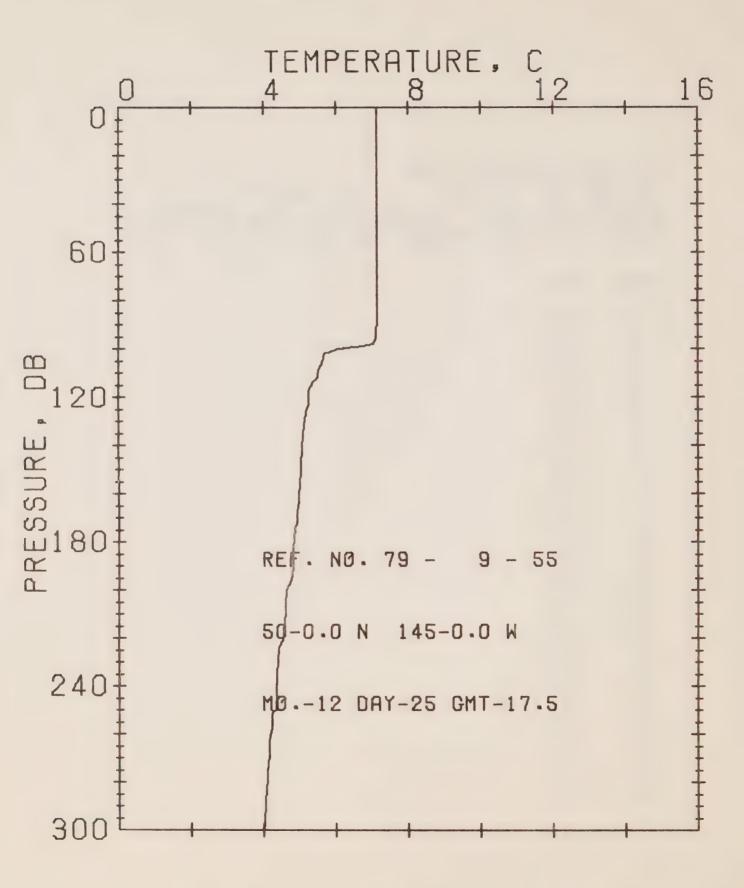
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 54 DATE 25/12/79

POSITION 50- .ON, 145- .OW GMT .O STATION P

RESULTS OF STP CAST 116 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210	7.01 7.01 7.01 7.01 7.01 7.01 7.00 7.00
220	4.92
230 240	4.81
250	4.60
260	4.58
270	4.54
280	4.47
290	4.42
300	4.31



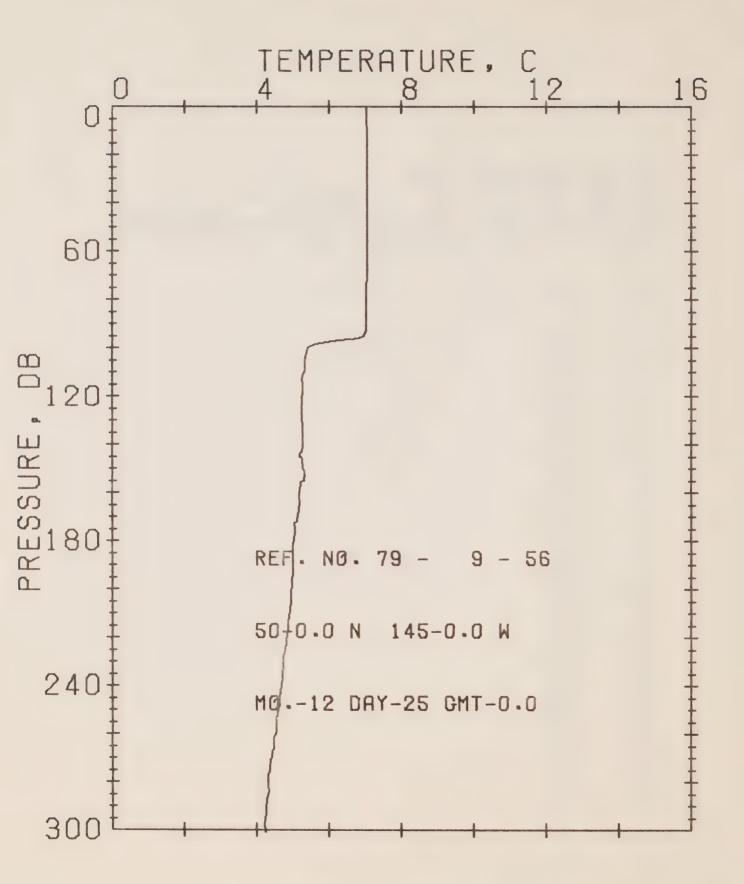
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 55 DATE 25/12/79

POSITION 50- .ON, 145- .OW GMT 17.5 STATION P

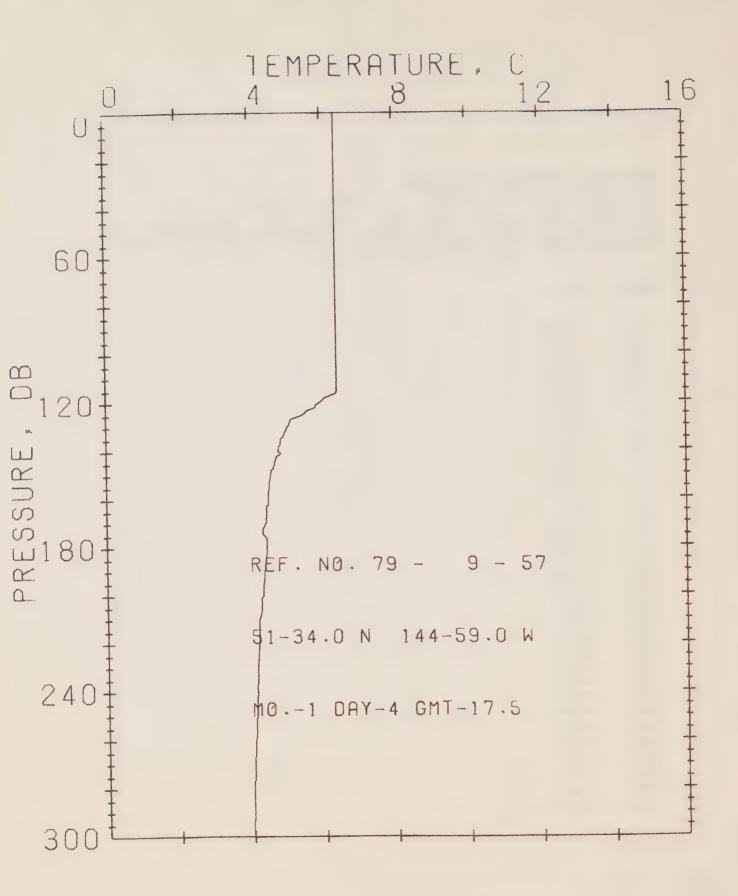
RESULTS OF STP CAST 93 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	7.15
10	7.15
20	7.14
30	7.14
40	7.14
50	7.14
60	7.14
70	7.14
80	7.14
90	7.14
100	6.07
110	5.51
120	5.24
130	5.15
140	5.09
150	5.05
160	4.99
170	4.94
180	4.84
190	4.82
200	4.66
210	4.61
220	4.55
230	4.40
240	4.35
250	4.35
260	4.21
270	4.15
280	4.10
290	4.05
300	4.01



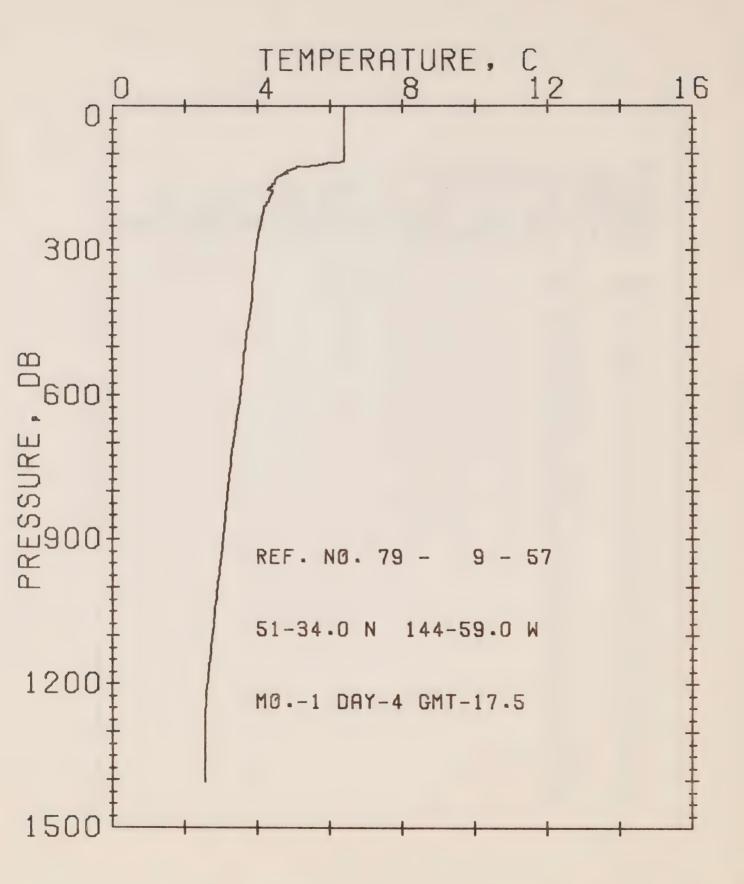
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 56 DATE 25/12/79
POSITION 50- .ON, 145- .OW GMT .O STATION P
RESULTS OF STP CAST 103 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.05
10	7.06
20	7.06
30	7.06
40	7.06
50	7.06
60	7.06
70	7.06
80	7.05
90	7.03
100	5.42
110	5.33
120	5.26
130	5.25
140	5.27
150	5.28
160	5.19
170	5.13
180	5.04
190	5.01
200	4.97
210	4.92
220	4.85
230	4.74
240	4.69
250	4.61
260	4.54
270	4.41
280	4.28
290 300	4.23
300	4060



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 57 DATE 4/ 1/80
POSITION 51-34.0N, 144-59.0W GMT 17.5 STATION P
RESULTS OF STP CAST 128 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.41
10	6.40
20	6.41
30	6.41
40	6.41
50	6.41
60	6.41
70	6.41
80	6.41
90	6.41
100	6.41
110	6.41
120	5.92
130	5.02
140	4.76
150	4.55
160	4'.47
170	4.40
180	4.44
190	4.34
200	4.31
210	4.20
220	4.18
230	4.14
240	4.12
250	4.11
260	4.06
270	4.02
280	4.00
290	4.00
300	3.97



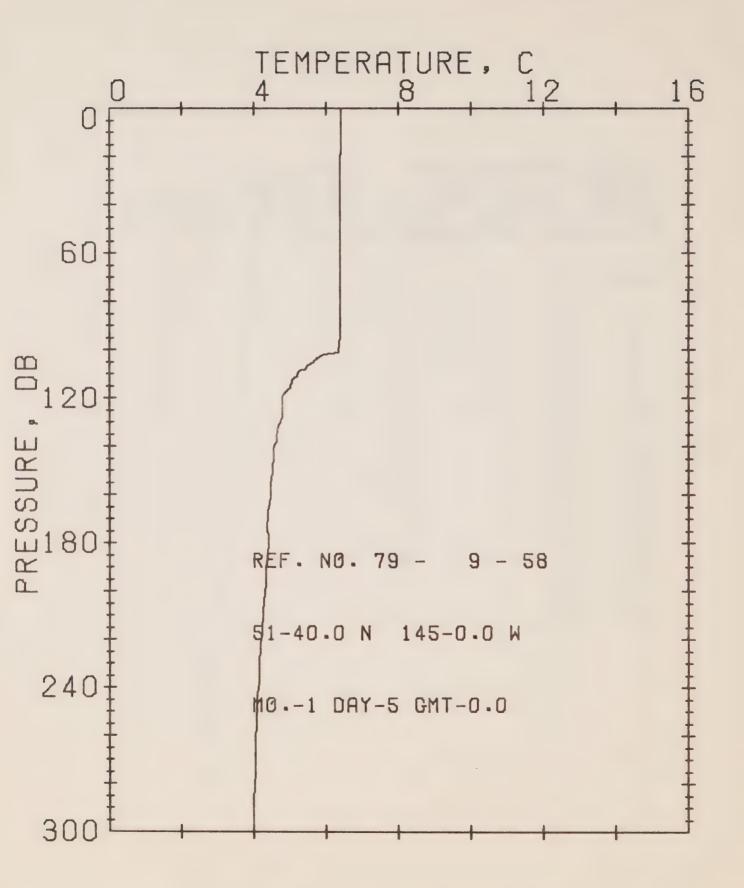
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 57 DATE 4/ 1/80

POSITION 51-34.0N: 144-59.0W GMT 17.5 STATION P

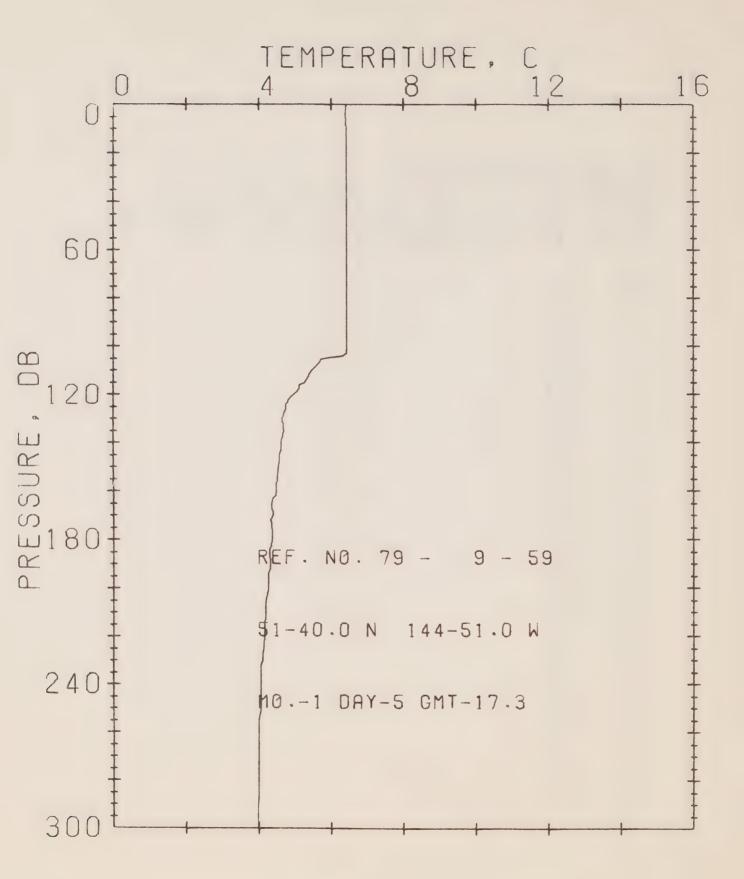
RESULTS OF STP CAST 296 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
0	6.41
10	6.40
20	6.41
30	6.41
50	6.41
75	6.41
100	6.41
125	5.44
150	4.55
175	4.37
200	4.31
225	4.16
250	4.11
300	3.97
400	3.86
500	3.68
600	3.54
800	3.19
1000	2.90
1200	2.62



OFFSHORE OCÉANOGRAPHY GROUP
REFERENCE NO. 79- 9- 58 DATE 5/ 1/80
POSITION 51-40.0N, 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 132 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.43
10	6.43
20	6.41
30	6.41
40	6.41
50	6.40
60	6.40
70	6.39
80	6.39
90	6.39
100	6.35
110	5.22
120	4.80
130	4.75
140	4.58
150	4.54
160	4.47
170	4.41
180	4.42
190	4.35
200	4.32
210	4.28
220	4.22
230	4.16
240	4.12
250	4.10
260	4.06
270	4.04
280	4.03
290	4.01
300	4.00



OFFSHORE OCEANOGRAPHY GROUP

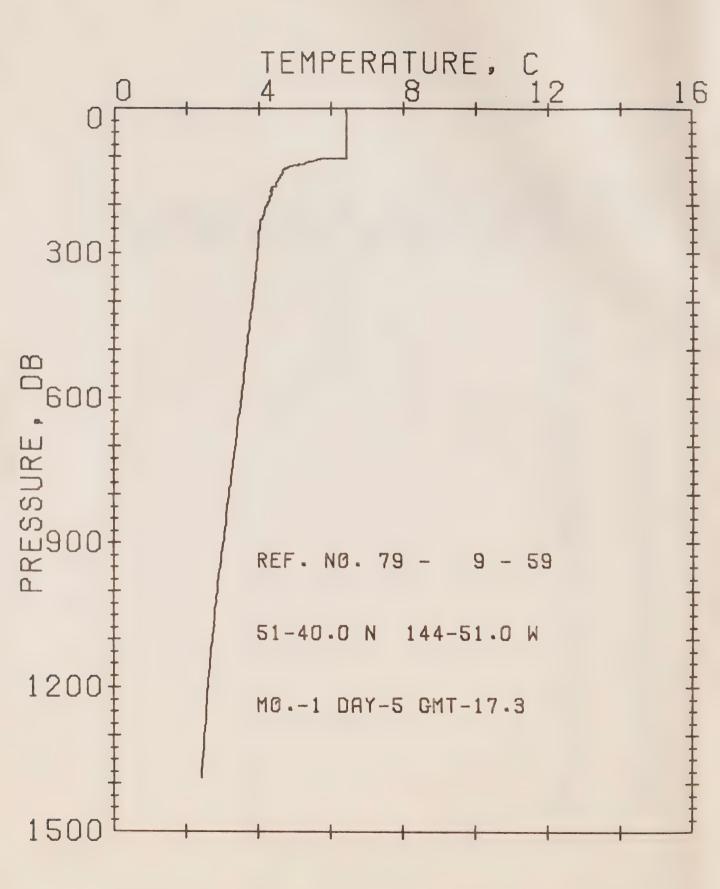
REFERENCE NO. 79- 9- 59 DATE 5/ 1/80

POSITION 51-40.0N, 144-51.0W GMT 17.3 STATION P

RESULTS OF STP CAST 147 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED.PRESSURES ARE INPUT

0 6.42 10 6.43 20 6.42 30 6.42 40 6.42 50 6.42 60 6.43 70 6.43 80 6.43 90 6.43 100 6.43 110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 280 4.00 290 3.98 300 3.98	PRESS	TEMP
10 6.43 20 6.42 30 6.42 40 6.42 50 6.42 60 6.43 70 6.43 80 6.43 90 6.43 110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.00 270 4.00 280 4.00 290 3.98	0	6.42
20 6.42 30 6.42 40 6.42 50 6.42 60 6.43 70 6.43 80 6.43 90 6.43 110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 280 4.00 290 3.98		
30 6.42 40 6.42 50 6.42 60 6.43 70 6.43 80 6.43 90 6.43 100 6.43 110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.00 270 4.00 280 4.00 290 3.98		
40       6.42         50       6.42         60       6.43         70       6.43         80       6.43         90       6.43         100       6.43         110       5.47         120       5.00         130       4.65         140       4.62         150       4.54         160       4.48         170       4.39         180       4.37         190       4.31         200       4.26         210       4.26         210       4.20         220       4.15         230       4.10         240       4.05         250       4.05         260       4.00         270       4.00         280       4.00         290       3.98		
50 6.42 60 6.43 70 6.43 80 6.43 90 6.43 100 6.43 110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 280 4.00 290 3.98		
60 6.43 70 6.43 80 6.43 90 6.43 100 6.43 110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 290 3.98		
70 6.43 80 6.43 90 6.43 100 6.43 110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 280 4.00 290 3.98		
80 6.43 90 6.43 100 6.43 110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 280 4.00 290 3.98		
90 6.43 100 6.43 110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 280 4.00 290 3.98		
100 6.43 110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 280 4.00 290 3.98		
110 5.47 120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 280 4.00 290 3.98		
120 5.00 130 4.65 140 4.62 150 4.54 160 4.48 170 4.39 180 4.37 190 4.31 200 4.26 210 4.20 220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 280 4.00 290 3.98		
130		
140		
150		
160		
170		
180		(1.30
190		11 37
200		
210		4.26
220 4.15 230 4.10 240 4.05 250 4.05 260 4.00 270 4.00 280 4.00 290 3.98	210	
230		4.15
250 4.05 260 4.00 270 4.00 280 4.00 290 3.98		4.10
260 4.00 270 4.00 280 4.00 290 3.98	240	4.05
260 4.00 270 4.00 280 4.00 290 3.98	250	4.05
280 4.00 290 3.98		4.00
290 3.98		
300 3.98		
	300	3.98



OFFSHORE OCEANOGRAPHY GROUP

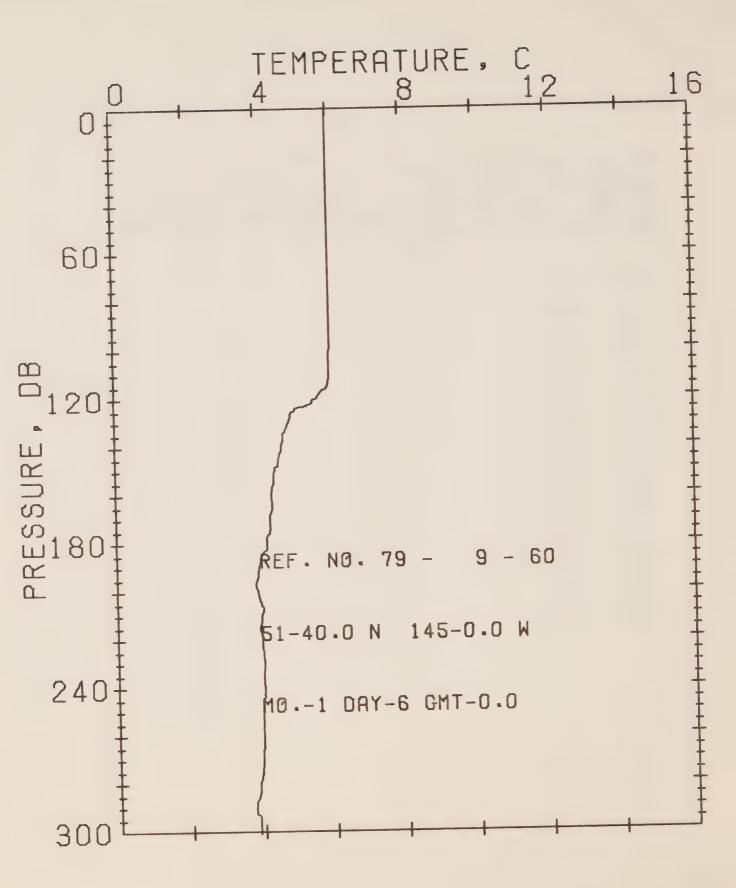
REFERENCE NO. 79- 9- 59 DATE 5/ 1/80

POSITION 51-40.0N, 144-51.0W GMT 17.3 STATION P

RESULTS OF STP CAST 324 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	6.42
10	6.43
20	6.42
30	6.42
50	6.42
75	6.43
100	6.43
125	4.75
150	4.54
175	4.34
200	4.26
225	4.12
250	4.05
300	3.98
400	3.85
500	3.69
600	3.54
800	3.20
1000	2.87
1200	2.62



OFFSHORE OCEANOGRAPHY GROUP

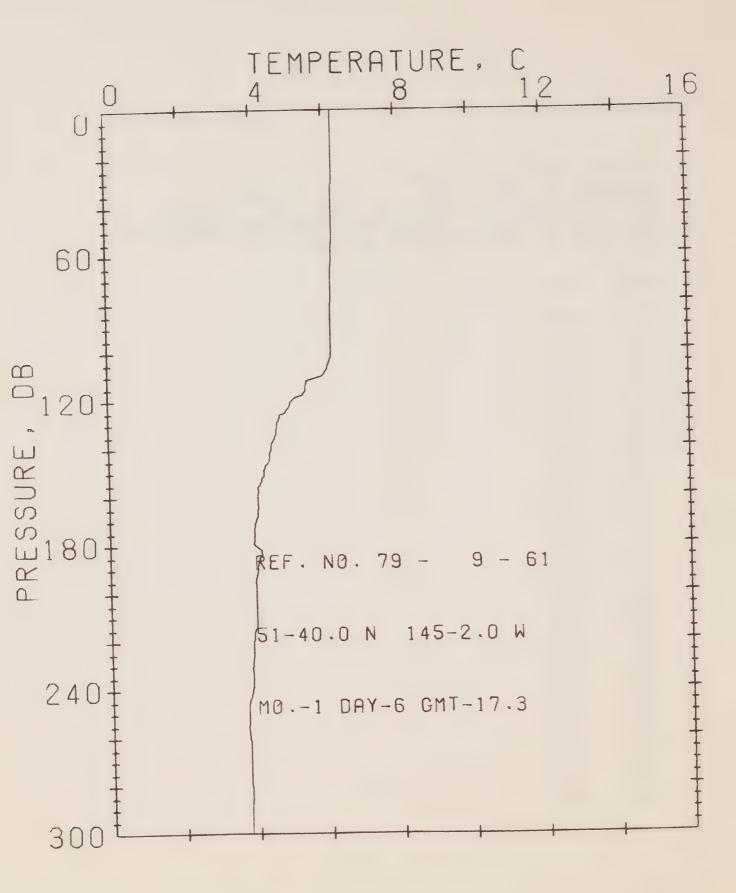
REFERENCE NO. 79- 9- 60 DATE 6/ 1/80

POSITION 51-40.0N, 145- .0W GMT .0 STATION P

RESULTS OF STP CAST 171 POINTS TAKEN FROM ANALOG TRACE

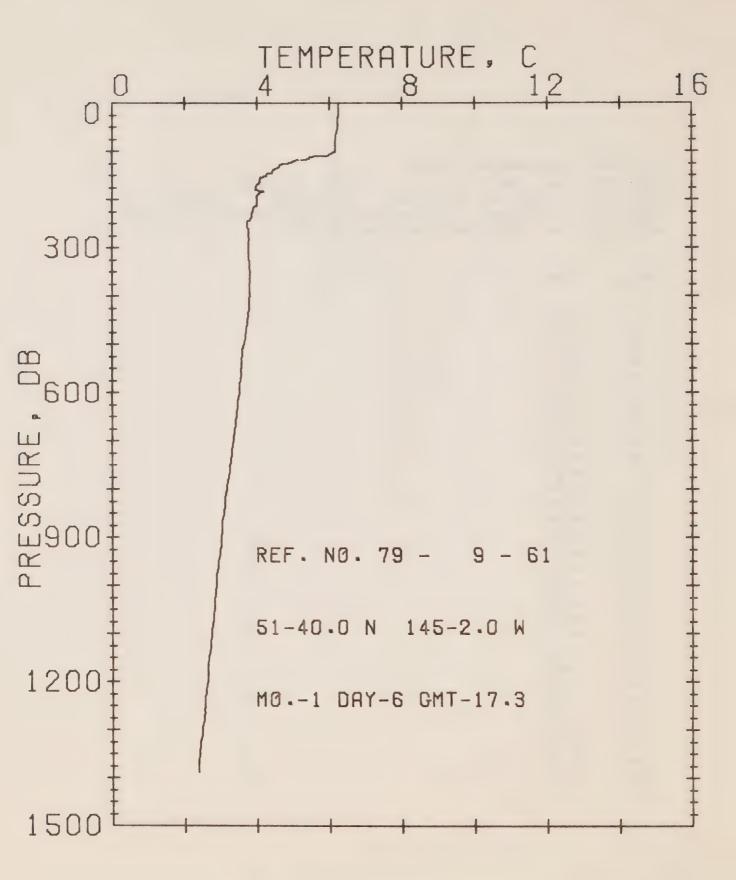
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	c 00
0	6.00
10	6.00
20	6.01
30	6.01
40	6.01
50	6.01
60	6.01
70	6.01
80	6.01
90	6.00
100	5.99
110	5.98
120	5.64
130	4.83
140	4.61
150	4.42
160	4.31
170	4.27
180	4.20
190	3.96
200	3.90
210	4.01
220	3.99
230	4.04
240	4.04
250	4.00
260	4.01
270	3.97
280	3.88
290	3.74
300	3.86



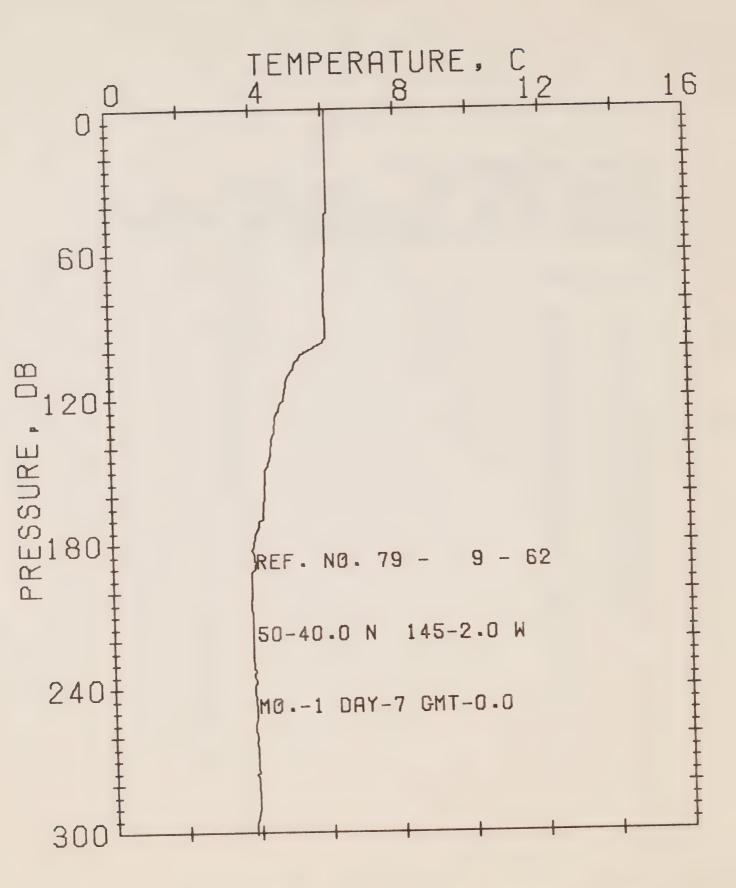
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 61 DATE 6/ 1/80
POSITION 51-40.0N, 145- 2.0W GMT 17.3 STATION P
RESULTS OF STP CAST 175 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.28
0	
10	6.27
20	6.27
30	6.27
40	6.25
50	6.23
60	6.21
70	6.20
80	6.17
90	6.16
100	6.17
110	5.93
120	5.06
130	4.64
140	4.47
150	4.26
160	4.08
170	4.03
180	3.97
190	4.05
200	4.01
210	4.01
220	3.89
230	3.87
240	3.85
250	3.74
260	3.73
270	3.76
280	3.78
290	3.77
300	3.77



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 61 DATE 6/ 1/80
POSITION 51-40.0N, 145- 2.0W GMT 17.3 STATION P
RESULTS OF STP CAST 363 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
U	6.28
10	6.27
20	0.27
30	0.27
50	6.23
75	6.19
100	6.17
125	4.89
150	4.26
175	3.97
200	4.01
225	3.89
250	3.74
300	3.77
400	3.80
500	3.64
600	3.51
800	3.17
1000	2.87
1500	2.63



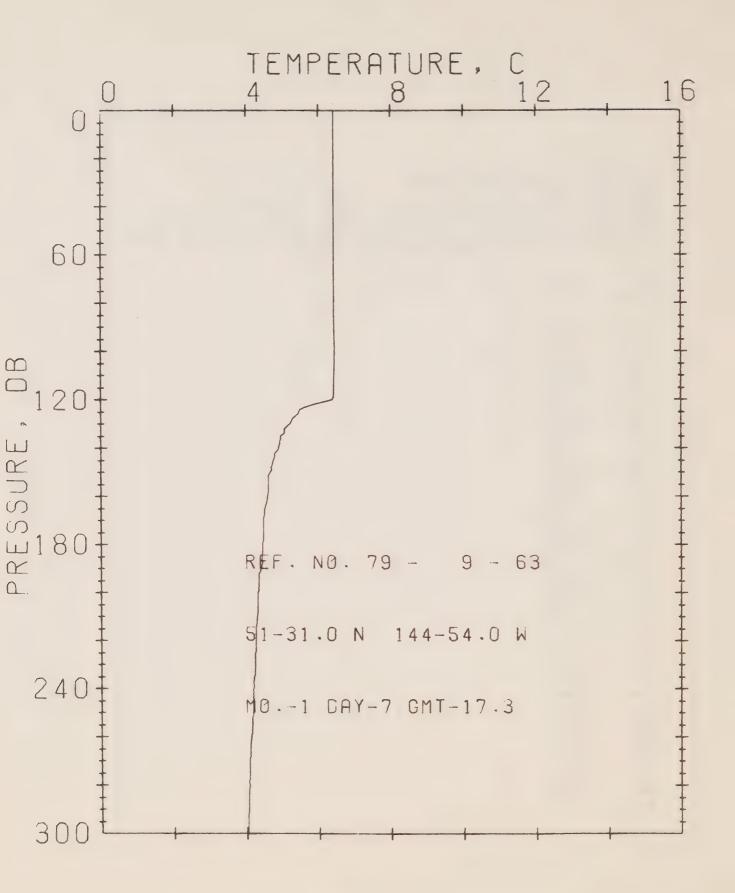
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 62 DATE 7/ 1/80

POSITION 50-40.0N, 145- 2.0W GMT .0 STATION P

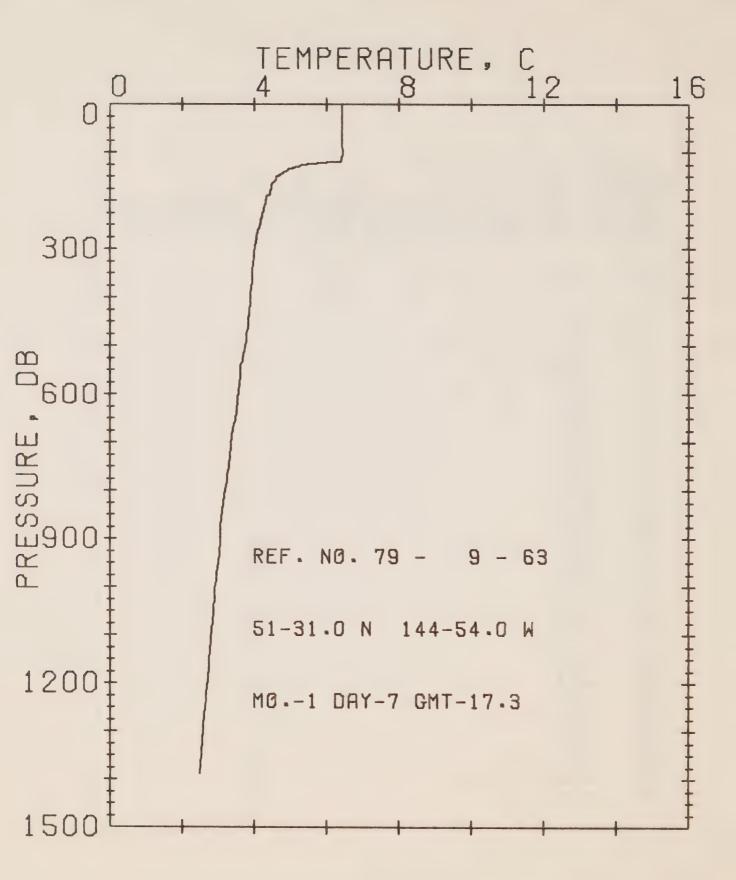
RESULTS OF STP CAST 179 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
U	6.12
10	6.12
20	6.12
30	6.12
40	6.12
50	6.05
60	6.04
70	6.00
80	5.98
90	0.01
100	5.55
110	4.99
120	4.81
130	4.56
140	4.45
150	4.28
160	4.25
170	4.18
180	3.93
190	3.94
200	3.83
210	3.83
220	3.84
230	3.86
240	3.87
250	3.92
260	3.92
270	3.92
280	3.94
290	3.94
300	3.85



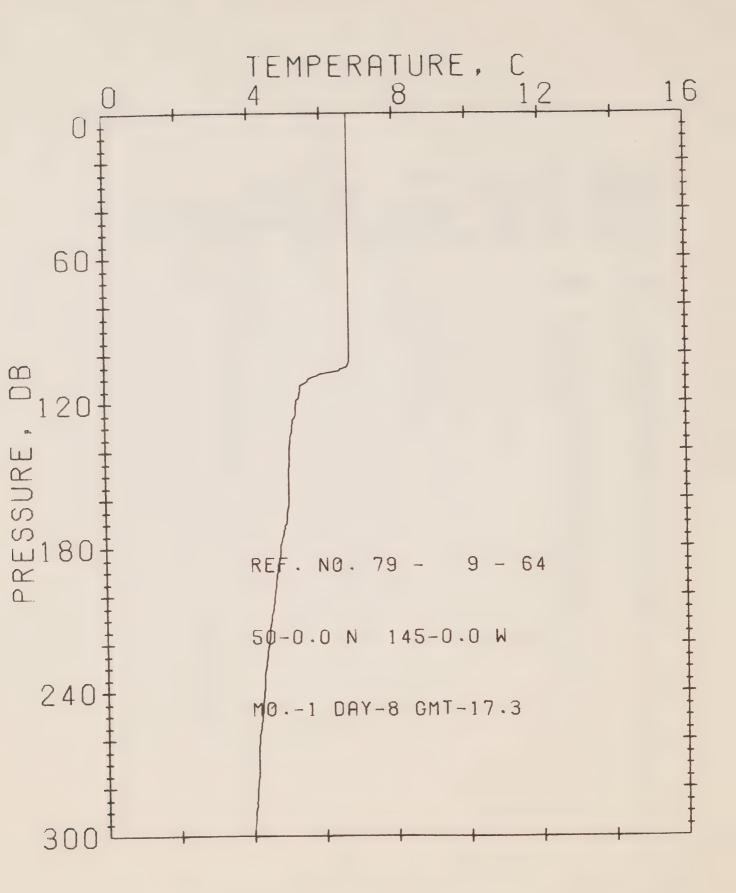
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 63 DATE 7/ 1/80
POSITION 51-31.0N, 144-54.0W GMT 17.3 STATION P
RESULTS OF STP CAST 135 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
Ú	6.43
10	6.44
20	6.44
30	6.43
40	6.44
50	6.44
60	6.44
70	6.44
80	6.44
90	6.44
100	6.45
110	6.44
120	6.39
130	5.22
140	4.92
150	4.67
160	4.59
170	4.49
180	4.46
190	4.40
200	4.33
210	4.29
220	4.27
230	4.23
240	4.20
250	4.18
260	4.13
270	4.09
280	4.07
290	4.04
300	4.03



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 63 DATE 7/ 1/80
POSITION 51-31.0N, 144-54.0W GMT 17.3 STATION P
RESULTS OF STP CAST 299 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
Ü	6.43
10	6.44
20	6.44
30	6.43
50	6.44
75	6.44
100	6.45
125	5.46
150	4.67
175	4.48
200	4.33
225	4.24
250	4.18
300	4.03
400	3.89
500	3.76
600	3.57
800	3.21
1000	2.92
1200	2.70



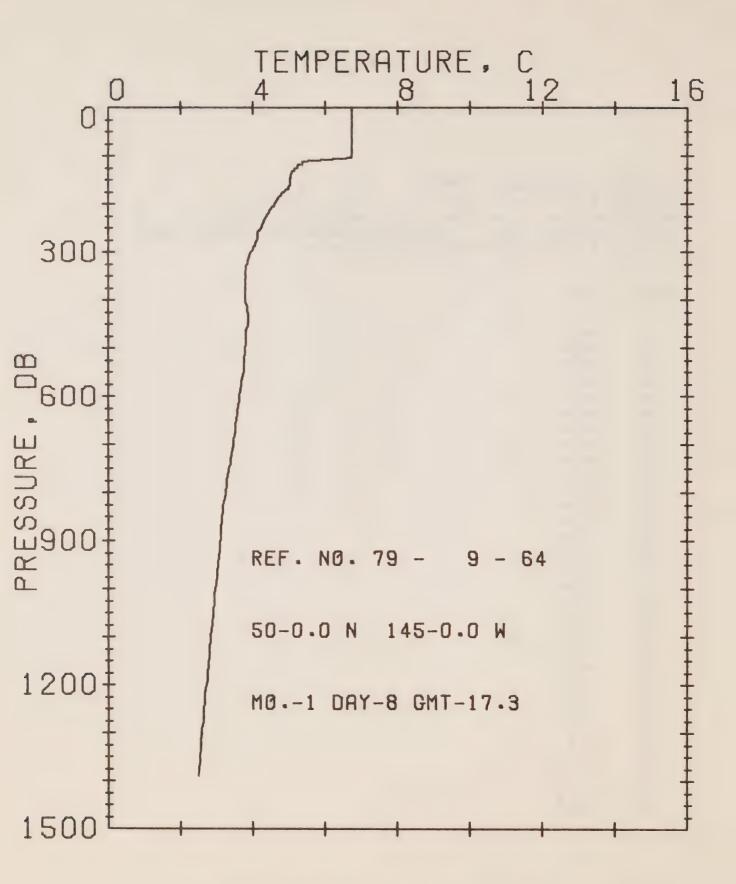
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 64 DATE 8/ 1/80

POSITION 50- .ON: 145- .OW GMT 17.3 STATION P

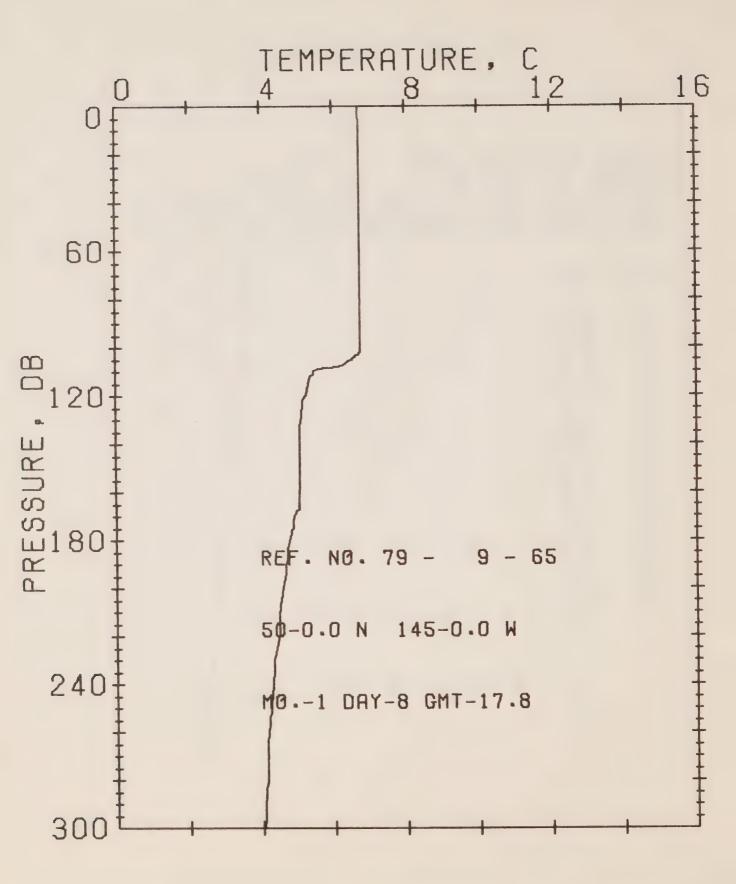
RESULTS OF STP CAST 149 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
0	6.75
10	6.76
20	6.76
30	6.75
40	6.75
50	6.76
60	6.76
70	6.76
80	6.76
90	6.76 6.75
100	6.75
110	5.64
120	5.28
130	5.14
140	5.08
150	5.05
160	5.05
170	4.98
180	4.81
190	4.72
200	4.63
210	4.53
220	4.45
230	4.37
240	4.29
250	4.24
260	4.16
270	4.14
280	4.10
290	4.03
300	3.97



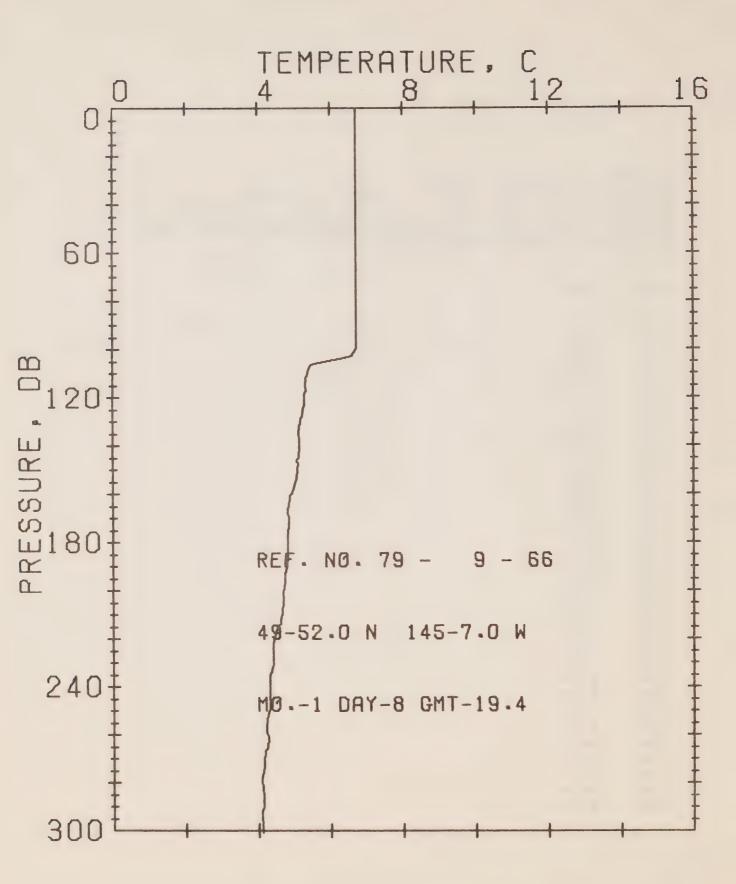
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 64 DATE 8/ 1/80
POSITION 50- .0N, 145- .0W GMT 17.3 STATION P
RESULTS OF STP CAST 325 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
Ü	6.75
10	6.76
20	6.76
30	6.75
50	6.76
75	6.76
100	6.75
125	5.24
150	5.05
175	4.88
200	4.63
225	4.39
250	4.24
300	3.97
400	3.79
500	3.80
600	3.63
800	3.25
1000	2.97
1200	2.72
12.00	



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 65 DATE 8/ 1/80
POSITION 50- .0N, 145- .0W GMT 17.8 STATION P
RESULTS OF STP CAST 139 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.73
10	6.74
20	6.75
30	6.75
40	6.76
50	6.76
60	6.76
70	6.76
80	6.76
90	6.76
100	6.76
110	5.44
120	5.25
130	5.10
140	5.08
150	5.08
160	5.05
170	4.92
180	4.77
190	4.69
200	4.59
210	4.49
220	4.46
230	4.33
240	4.30
250	4.25
260	4.15
270	4.14
280	4.13
290	4.06
300	4.02



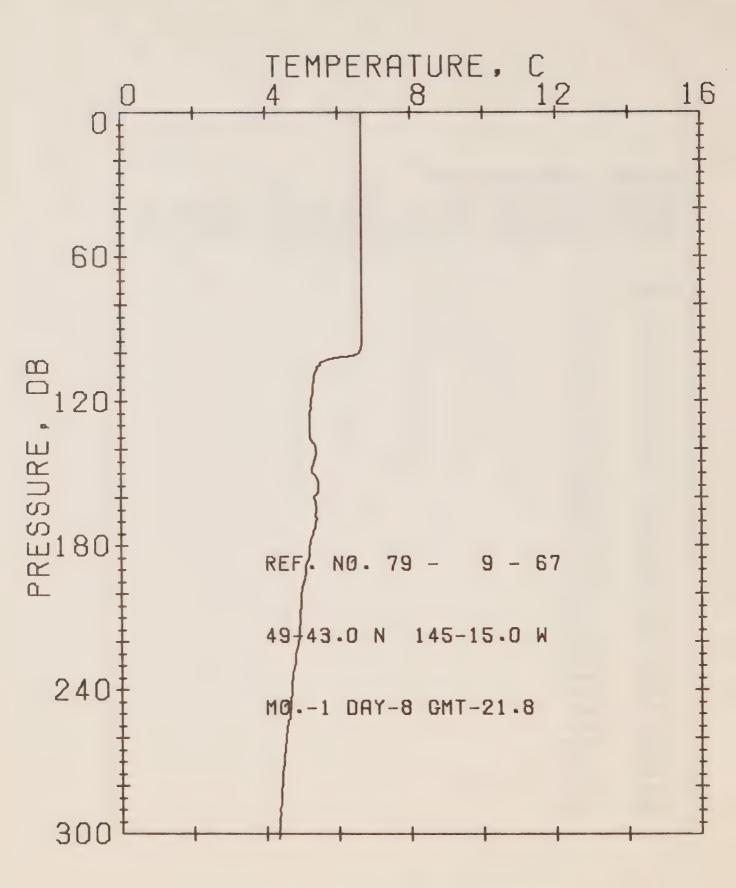
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 66 DATE 8/ 1/80

POSITION 49-52.0N: 145- 7.0W GMT 19.4 STATION W3

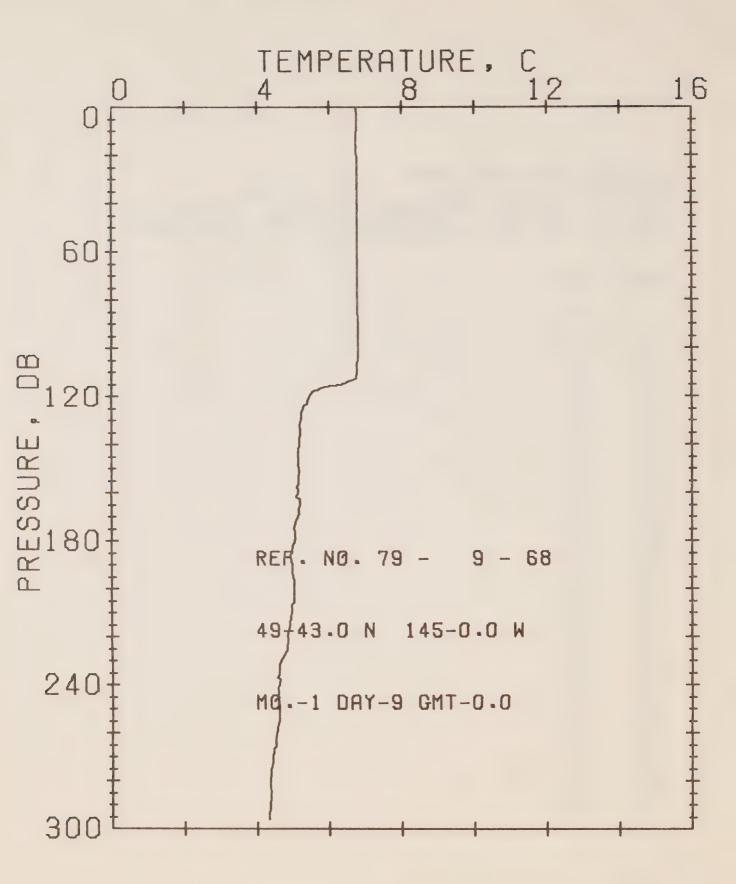
RESULTS OF STP CAST 179 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
0	6.72
10	6.72
20	6.72
30	6.72
40	6.71
50	6.72
60	6.72
70	6.72
80	6.72
90	6.72
100	6.72
110	5.39
120	5.28
130	5.16
140	5.14
150	5.10
160	4.94
170	4.86
180	4.83
190	4.79
200	4.71
210	4.67
220	4.46
230	4.40
240	4.32
250	4.30
260	4.24
270	4.17
280	4.09
290	4.13
300	4.11



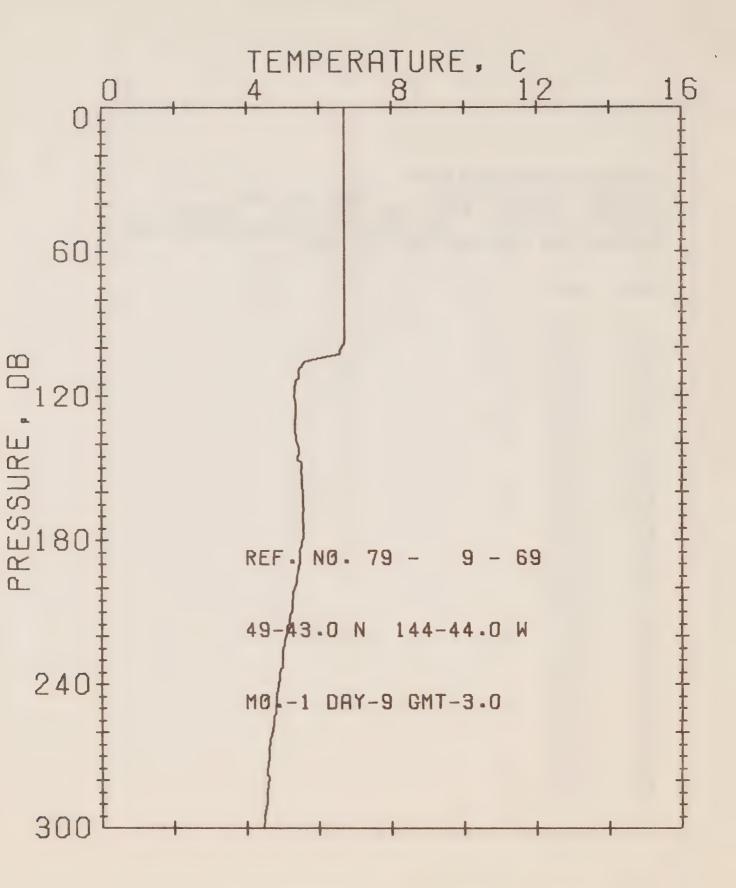
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 67 DATE 8/ 1/80
POSITION 49-43.0N, 145-15.0W GMT 21.8 STATION W4
RESULTS OF STP CAST 167 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.67
10	6.67
20	6.67
30	6.67
40	6.67
50	6.66
60	6.66
701	6.67
80	6.67
90	6.67
100	6.58
110	5.34
120	5.26
130	5.21
140	5.36
150	5.27
160	5.32
170	5.38
180	5.21
190	5.10
200	4.97
210	4.94
220	4.88
230	4.78
240	4.70
250	4.65
260	4.53
270	4.49
280	4.42
290	4.35
300	4.32



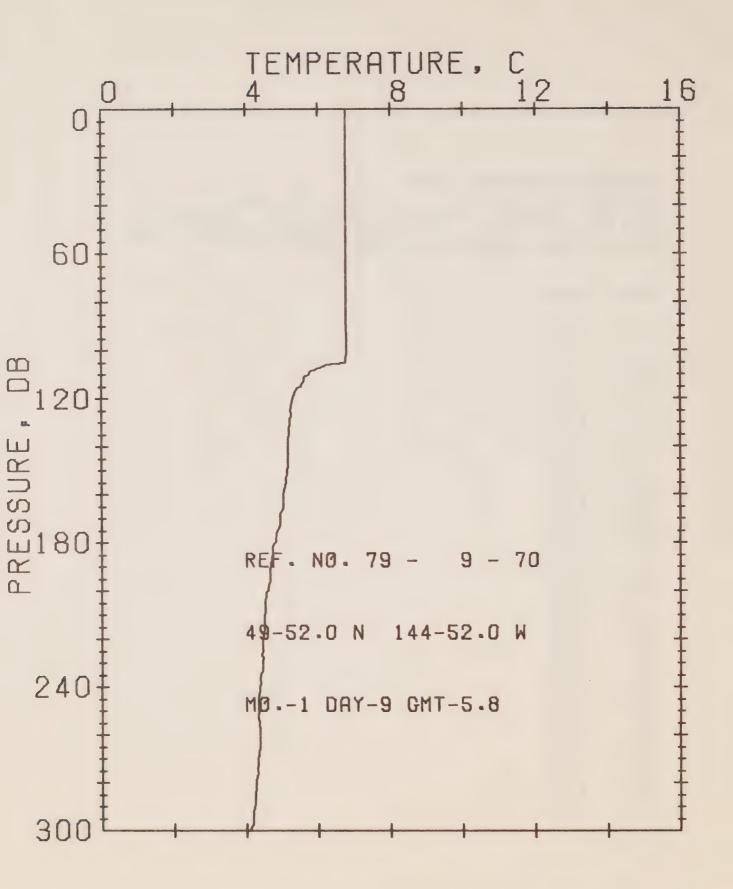
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 68 DATE 9/ 1/80
POSITION 49-43.0N. 145- .OW GMT .O STATION C1
RESULTS OF STP CAST 167 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	6.76
10	6.76
20	6.76
30	6.77
40	6.78
50	6.78
60	6.78
70	6.78
80	6.78
90	6.79
100	6.79
110	6.78
120	5.47
130	5.23
140	5.17
150	5.15
160	5.14
170	5.15
180	5.03
190	4.95
200	5.01
210	4.95
220	4.84
230	4.66
240	4.60
250	4.60
260	4.54
270	4.43
280	4.35
290	4.35



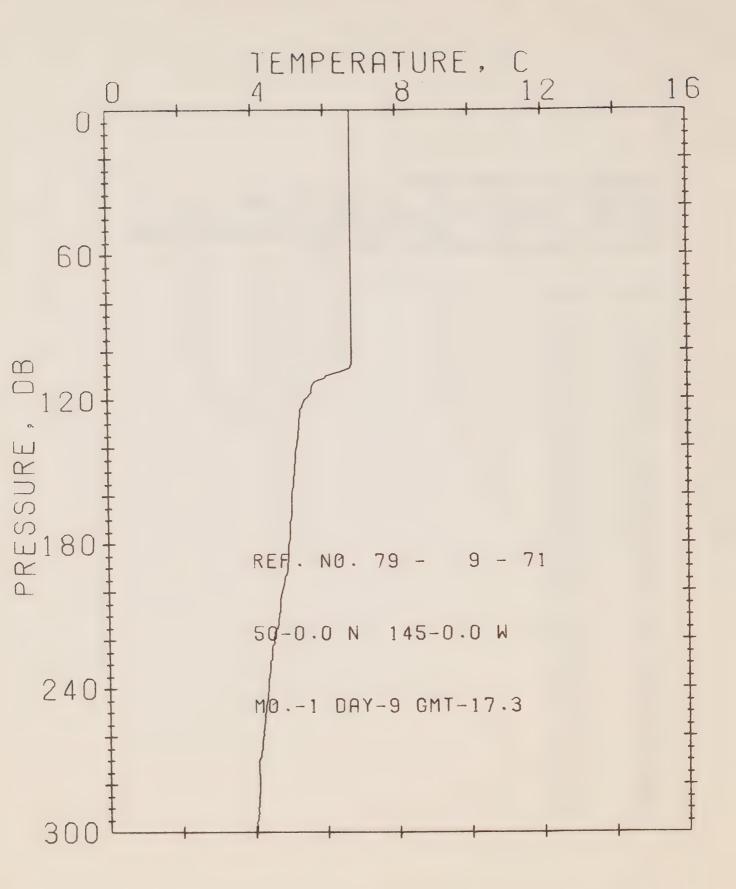
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 69 DATE 9/ 1/80
POSITION 49-43.0N, 144-44.0W GMT 3.0 STATION E4
RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.71
10	6.72
20	6.72
30	6.72
40	6.72
50	6.72
60	6.72
70	6.72
80	6.72
90	6.72
100	6.65
110	5.44
120	5.32
130	5.34
140	5.40
150	5.51
160	5.54
170	5.55
180	5.55
190	5.46
200	5.34
210	5.25
220	5.10
230	4.98
240	4.88
250	4.80
260	4.71
270	4.61
280	4.61
290	4.55
300	4.46



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 70 DATE 9/ 1/80
POSITION 49-52.0N, 144-52.0W GMT 5.8 STATION E3
RESULTS OF STP CAST 201 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210	6.77 6.78 6.78 6.78 6.78 6.78 6.78 6.78
220	4.47
230 240	4.45 4.38
250	4.34
260	4.37
270	4.33
286	4.27
290	4.23
300	4.09



OFFSHORE OCEANOGRAPHY GROUP

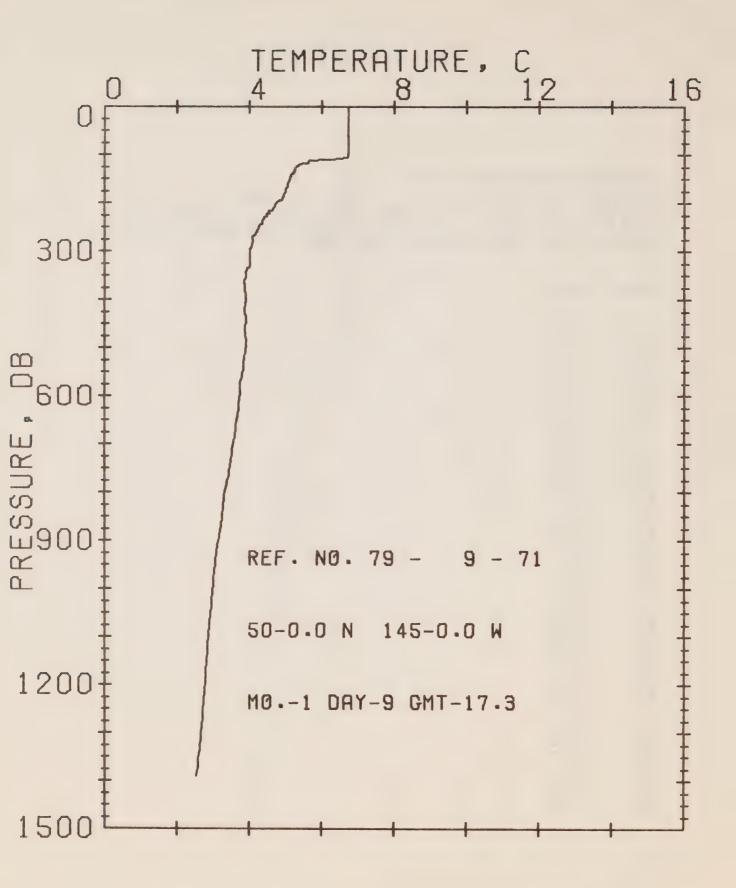
REFERENCE NO. 79- 9- 71 DATE 9/ 1/80

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 170 POINTS TAKEN FROM ANALOG TRACE

GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
Ú	6.74
10	6.74
20	6.74
30	6.74
40	6.74
50	6.74
60	6.74
70	6.75
80	6.75
90	6.76
100	6.75
110	6.06
120	5.43
130	5.27
140	5.20
150	5.14
160	5.06
170	5.03
180	4.98
190	4.93
200	4.78
210	4.69
220	4.54
230	4.43
240	4.37
250	4.29
260	4.21
270	4.07
280	4.10
290	4.06
300	4.02



OFFSHORE OCEANOGRAPHY GROUP

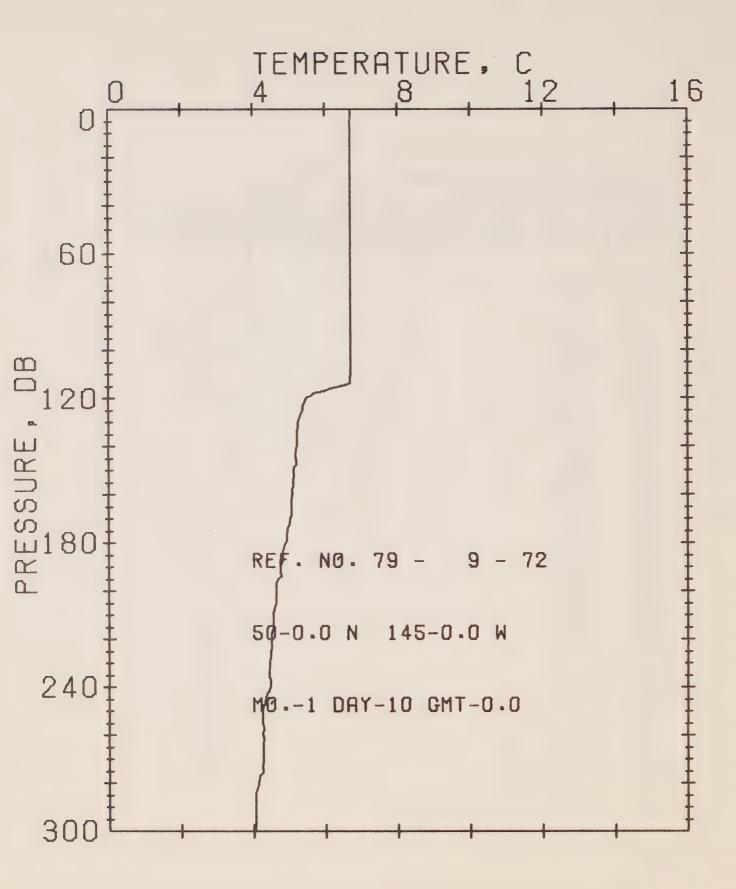
REFERENCE NO. 79- 9- 71 DATE 9/ 1/80

POSITION 50- .0N, 145- .0W GMT 17.3 STATION P

RESULTS OF STP CAST 366 POINTS TAKEN FROM ANALOG TRACE

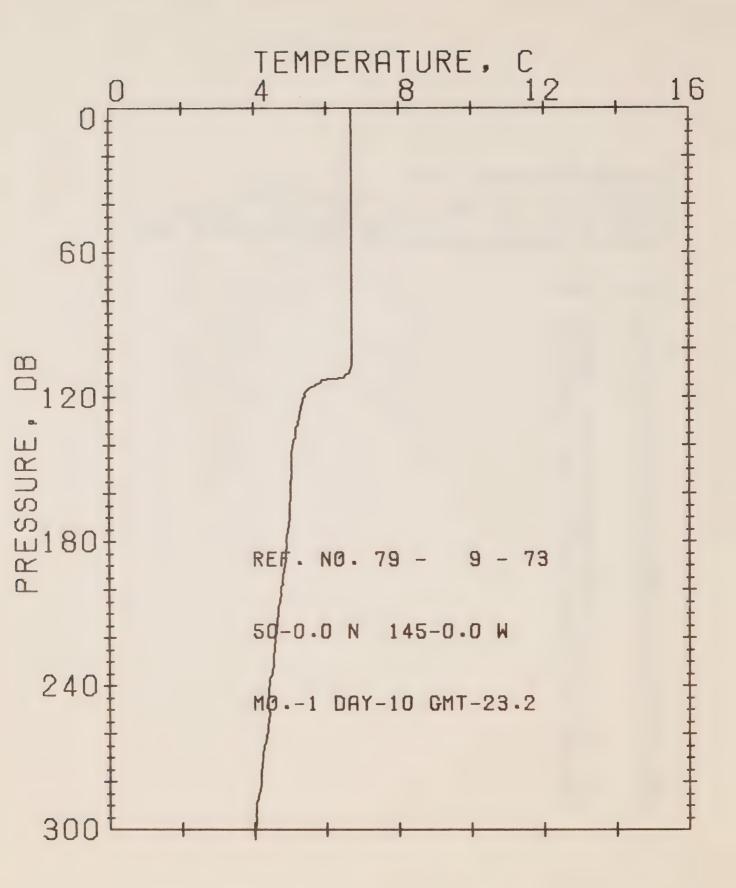
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.74
10	6.74
20	6.74
30	6.74
50	6.74
75	6.75
100	6.75
125	5.32
150	5.14
175	5.01
200	4.78
225	4.48
250	4.29
300	4.02
400	3.89
500	3.90
600	3.75
800	3.33
1000	2.99
1200	2.78
1200	2.70



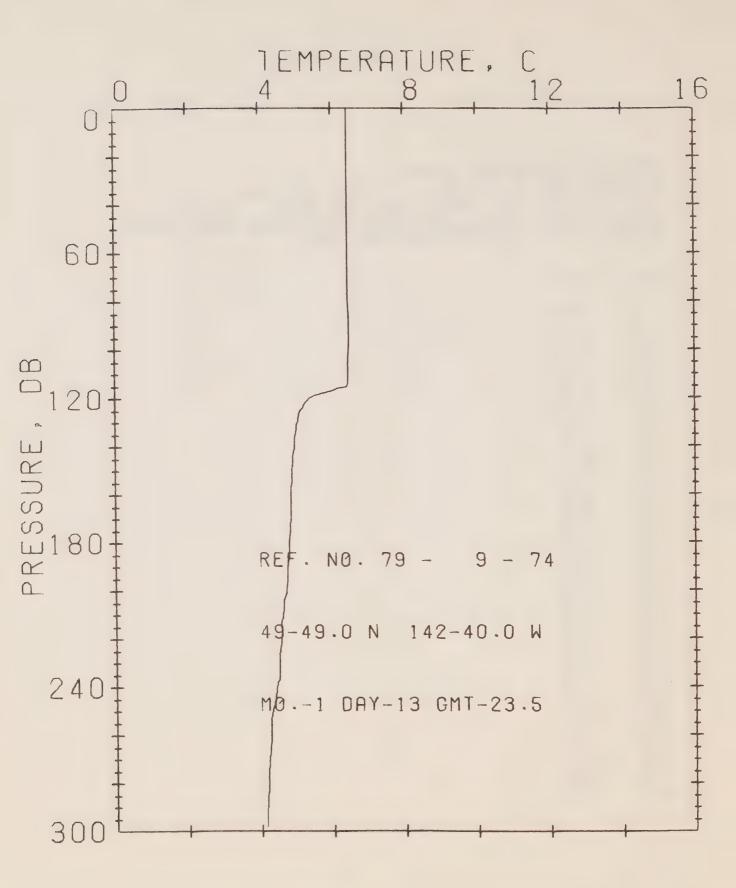
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 72 DATE 10/ 1/80
POSITION 50- .0N. 145- .0W GMT .0 STATION P
RESULTS OF STP CAST 167 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	6.71
10	6.71
20	6.71
30	6.71
40	6.71
50	6.71
60	6.71
70	6.71 6.71
80	6.71
90	6.71
100	6.71
110	6.71
120	5.49
130	5.26
140	5.22
150	5.13
160	5.10
170	5.05
180	4.91
190	4.75
200	4.65
210	4.57
220	4.51
230	4.45
240	4.49
250	4.24
260	4.24
270	4.28
280	4.12
290	4.05
300	4.03



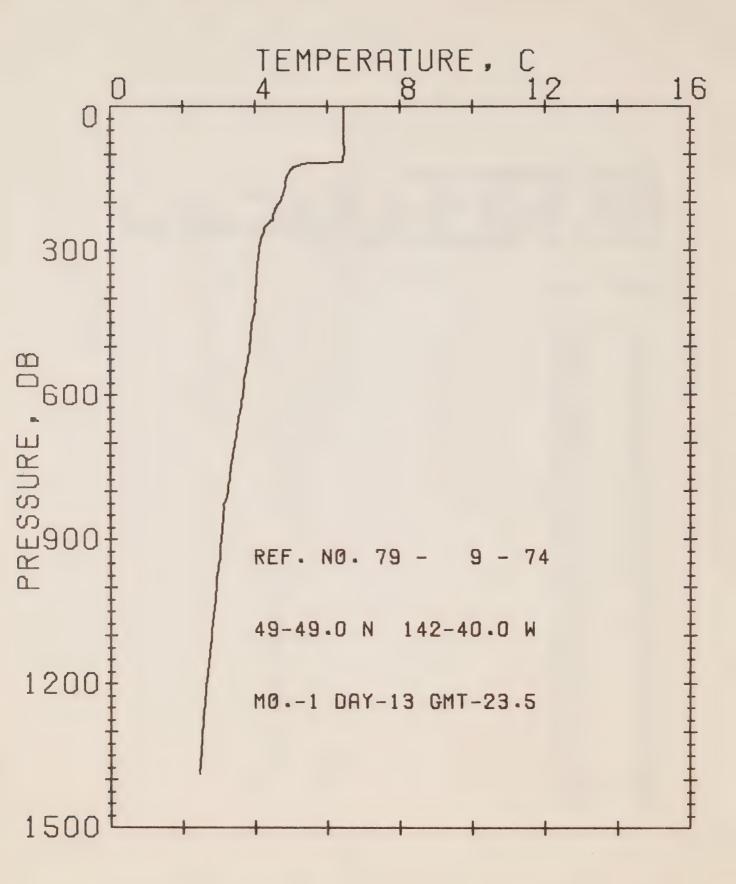
OFFSHORE OCEANUGRAPHY GROUP
REFERENCE NO. 79- 9- 73 DATE 10/ 1/80
POSITION 50- .0N: 145- .0W GMT 23.2 STATION P
RESULTS OF STP CAST 173 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
0	6.70
10	6.71
20	6.71
30	6.71
40	6.71
50	6.71
60	6.71
70	6.71
80	6.71
90	6.71
100	6.71
110	6.63
120	5.41
130	5.22
140	5.08
150	5.04
160	5.01
170	4.99
180	4.89
190	4.85
200	4.75
210	4.68
220	4.59
230	4.53
240	4.44
250	4.41
260	4.36
270	4.24
280	4.18
290	4.06
300	4.01



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 74 DATE 13/ 1/80
POSITION 49-49.0N, 142-40.0W GMT 23.5 STATION 12
RESULTS OF STP CAST 144 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	6.46
10	6.46
20	6.46
30	6.46
40	6.46
50	6.46
50 60	6.46
	6.46
70	6.46
80	6.47
90	6.47
100	6.46
110	5.38
120	
130	5.04
140 150	4.96 4.88
	4.86
160	4.86
170	
180	4.81
190	4.76
200	4.73
210	4.60
220	4.57
230	4.50
240	4.44
250	4.33
260	4.26
270	4.22
280	4.19
290	4.15
300	4.14



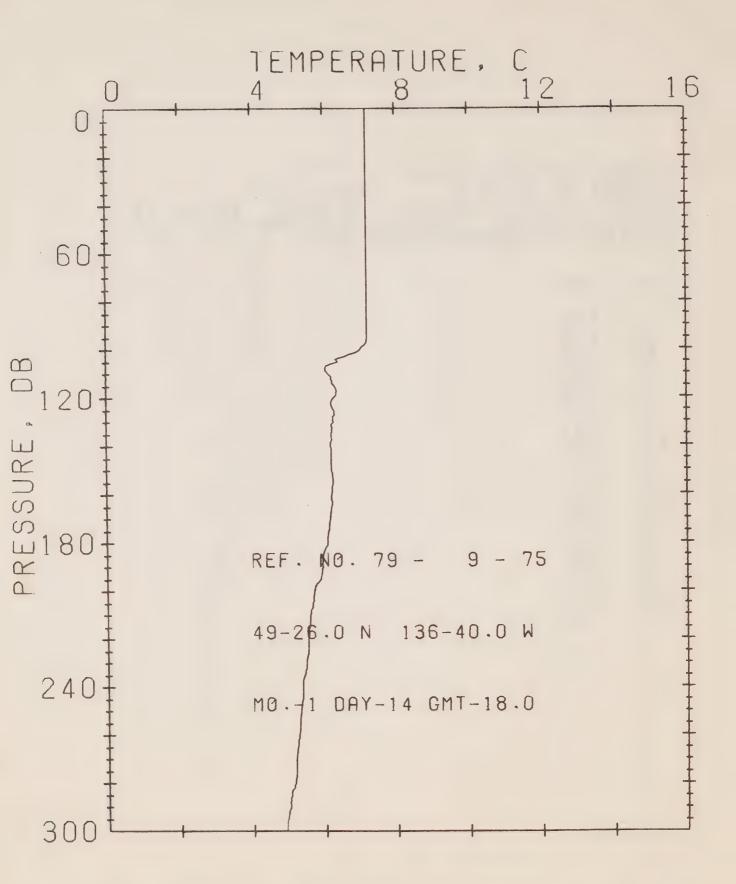
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 74 DATE 13/ 1/80

POSITION 49-49.0N, 142-40.0W GMT 23.5 STATION 12

RESULTS OF STP CAST 334 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	6.46
10	6.46
20	6.46
30	6.46
50	6.46
75	6.46
100	6.47
125	5.11
150	4.88
175	4.83
200	4.73
225	4.54
250	4.33
300	4.14
400	4.01
500	3.87
600	3.67
800	3.24
1000	2.93
1200	2.66



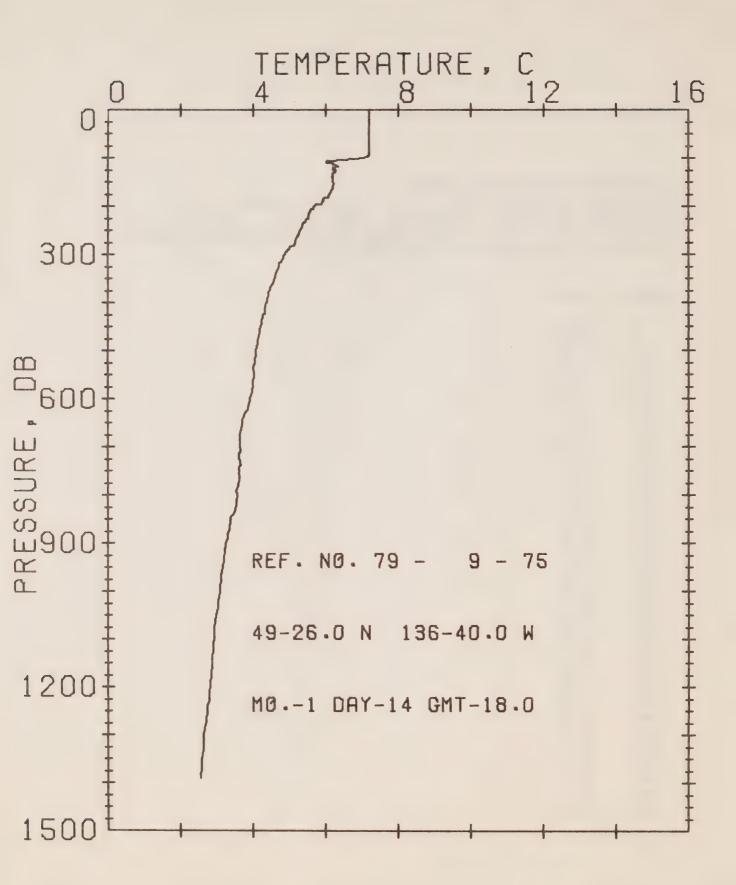
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 75 DATE 14/ 1/80

POSITION 49-26.0N, 136-40.0W GMT 18.0 STATION 9

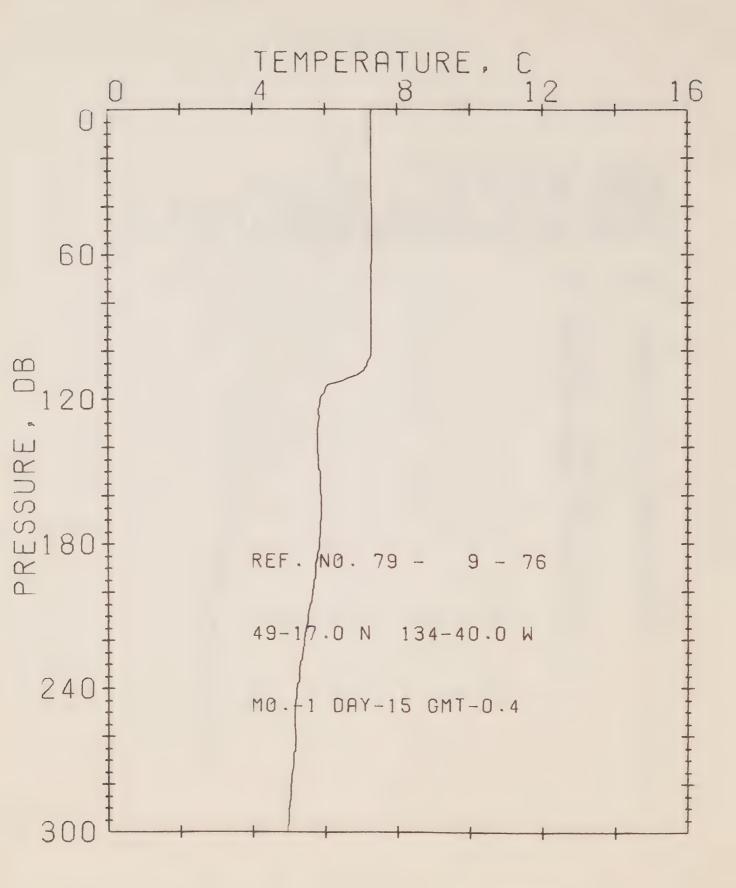
RESULTS OF STP CAST 178 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.20
10	7.20
20	7.20
30	7.20
40	7.20
50	7.20
60	7.20
70	7.20
80	7.20
90	7.20
100	7.00
110	6.10
120	6.28
130	6.26
140	6.15
150	6.20
160	6.20
170	6.15
180	6.09
190	5.94 5.71
200	5.71
210	5.58
220	5.51
230	5.46
240	5.36
250	5.31
260	5.25
270	5.18
280	5 • 14
290	5.01
300	4.89



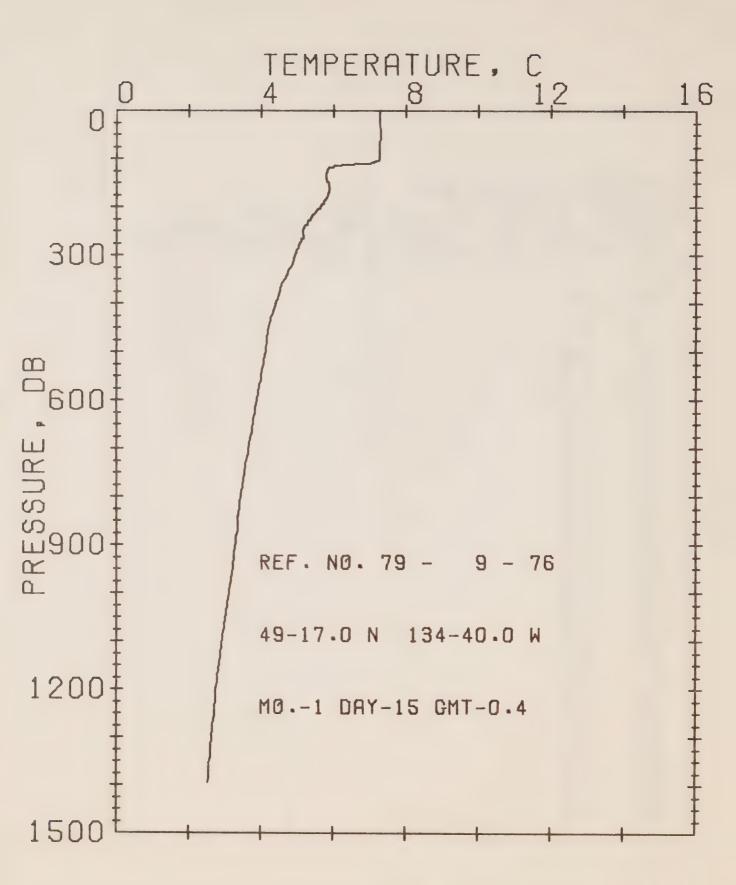
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 75 DATE 14/ 1/80
POSITION 49-26.0N. 136-40.0W GMT 18.0 STATION 9
RESULTS OF STP CAST 439 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	7.20
10	7.20
20	7.20
30	7.20
50	7.20
75	7.20
100	7.00
125	6.28
150	6.20
175	6.12
200	5.71
225	5.51
250	5.31
300	: 4.89
400	4.38
500	4.08
600	3.91
800	3.57
1000	3.08
1200	2.82



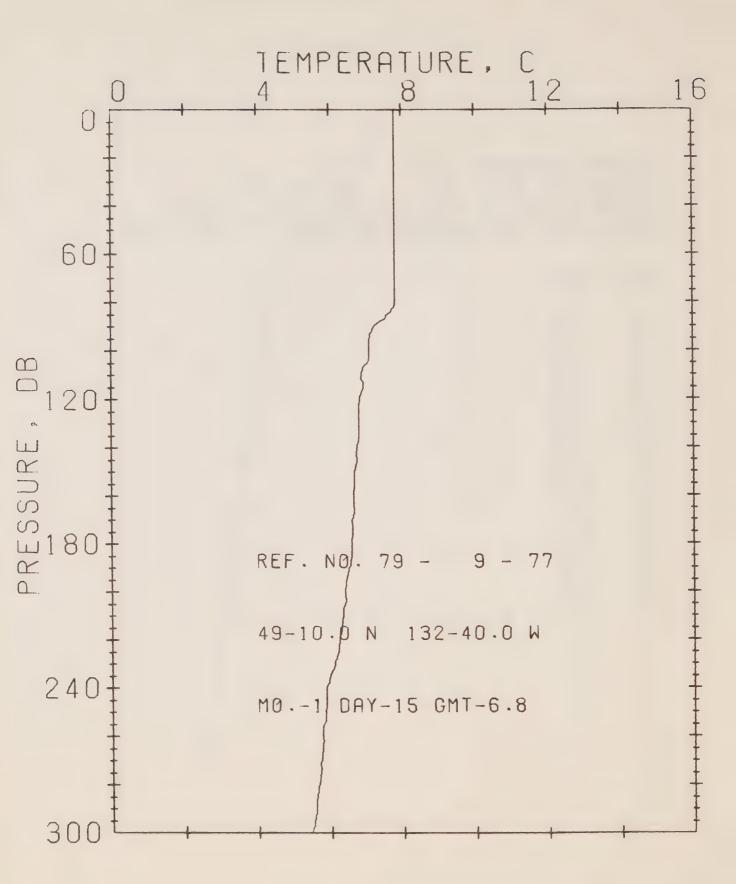
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 76 - DATE 15/ 1/80
POSITION 49-17.0N: 134-40.0W GMT .4 STATION 8
RESULTS OF STP CAST 170 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED: PRESSURES ARE INPUT

PRESS	TEMP
O	7.31
10	7.29
20	7.29
30	7.29
40	7.30
50	7.30
60	7.30
70	7.28
80	7.29
90	7.29
100	7.28
110	6.91
120	5.86
130	5.82
140	5.78
150	5.86
160	5.89
170	5.89 5.85
180 190	5.74
200	5.65
210	5.52
220	5.42
230	5.30
240	5.20
250	5.15
260	5.16
270	5.12
280	5.05
290	4.99
300	4.94



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 76 DATE 15/ 1/80
POSITION 49-17.0N, 134-40.0W GMT .4 STATION 8
RESULTS OF STP CAST 394 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
Ú	7.31
10	7.29
20	7.29
30	7.29
50	7.30
75	7.29
100	7.28
125	5.81
150	5.86
175	5.87
200	5.65
225	5.38
250	5.15
300	4.94
400	4.42
500	4.12
600	3.90
800	3.43
1000	3.12
1200	2.77



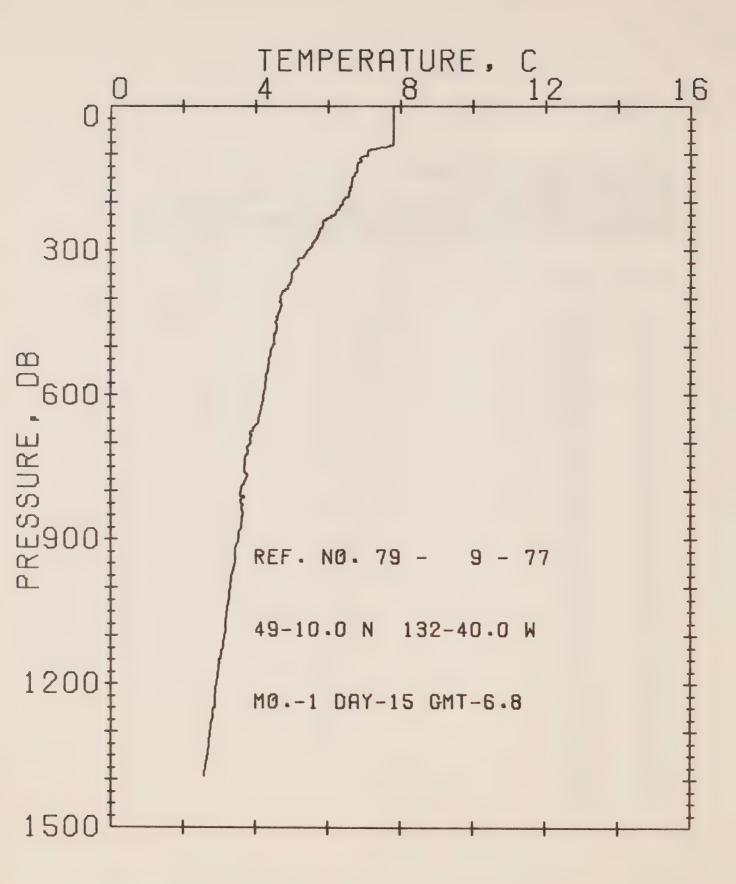
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 77 DATE 15/ 1/80

POSITION 49-10.0N, 132-40.0W GMT 6.8 STATION 7

RESULTS OF STP CAST 191 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.80
10	7.80
20	7.80
30	7.80
40	7.80
50	7.80
60	7.80
70	7.81
80	7.81
90	7.22
100	7.09
110	6.88
120	6.83
130	6.81
140	6.75
150	6.67
160	6.65
170	6.60
180	6.60
190	6.52
200	6.41
210	6.36
220	6.24
230	6.12
240	5.88
250	5.85
260	5.77
270	5.72
280	5.65
290	5.56 5.44
300	5.44



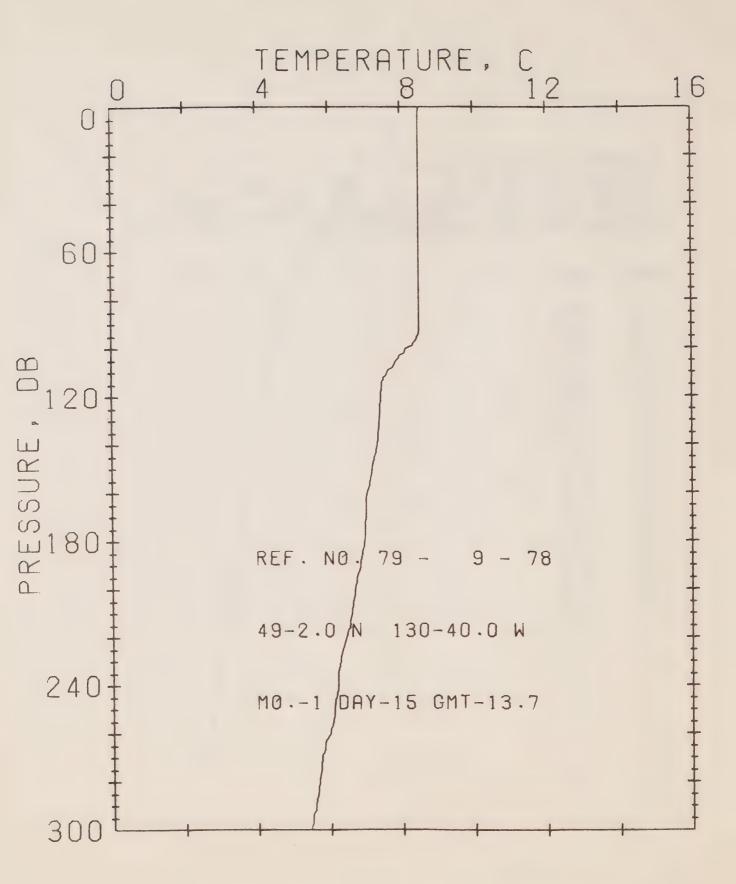
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 77 DATE 15/ 1/80

POSITION 49-10.0N, 132-40.0W GMT 6.8 STATION 7

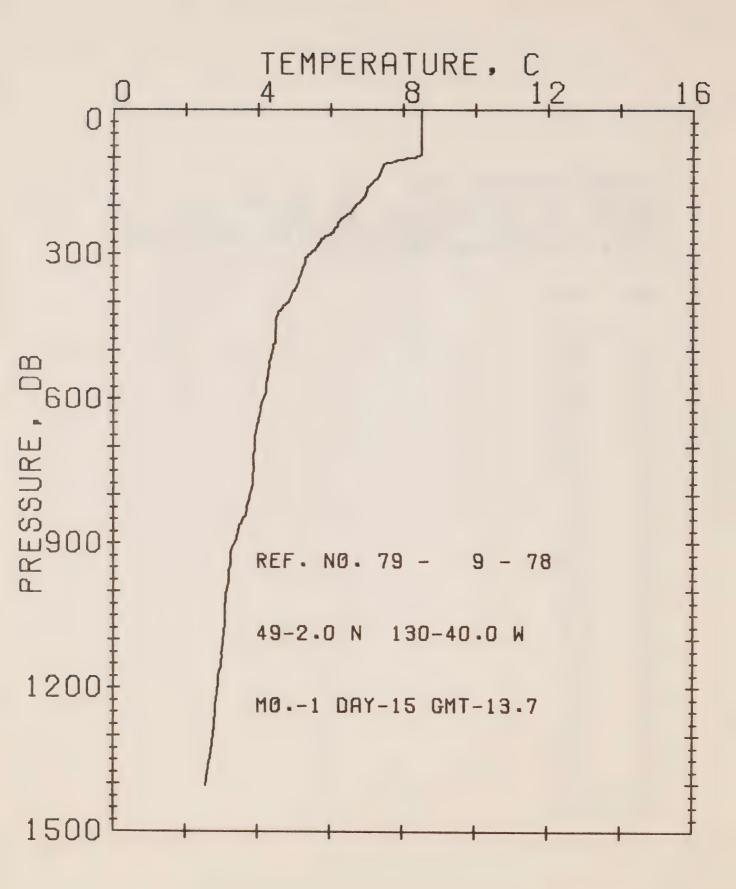
RESULTS OF STP CAST 461 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	7.80
10	7.80
20	7.80
30	7.80
50	7.80
75	7.81
100	7.09
125	6.80
150	6.67
175	6.62
200	6.41
225	6.22
250	5.85
300	5.44
400	4.67
500	4.48
600	4.22
800	3.59
1000	3.30
1200	2.93



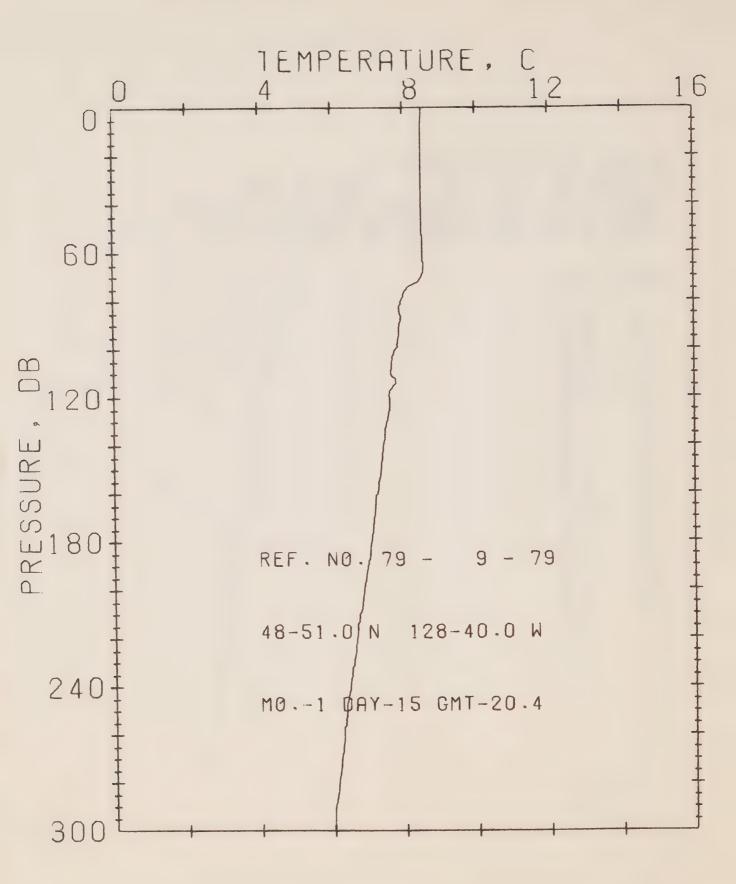
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 78 DATE 15/ 1/80
POSITION 49- 2.0N, 130-40.0W GMT 13.7 STATION 6
RESULTS OF STP CAST 157 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	8.53
10	8.51
20	8.51
30	8.51
40	8.51
50	8.51
60	8.51
70	8.51
80	8.52
90	8.52
100	8.14
110	7.62
120	7.44
130	7.40
140	7.32
150	7.19
160	7.05
170	7.00
180	6.97
190	6.85
200	6.70
210	0.61
220	6.46
230	6.29
240	6.21
250	6.12
260	5.99
270	5.76
280	5.68
290	5.57
300	5.44



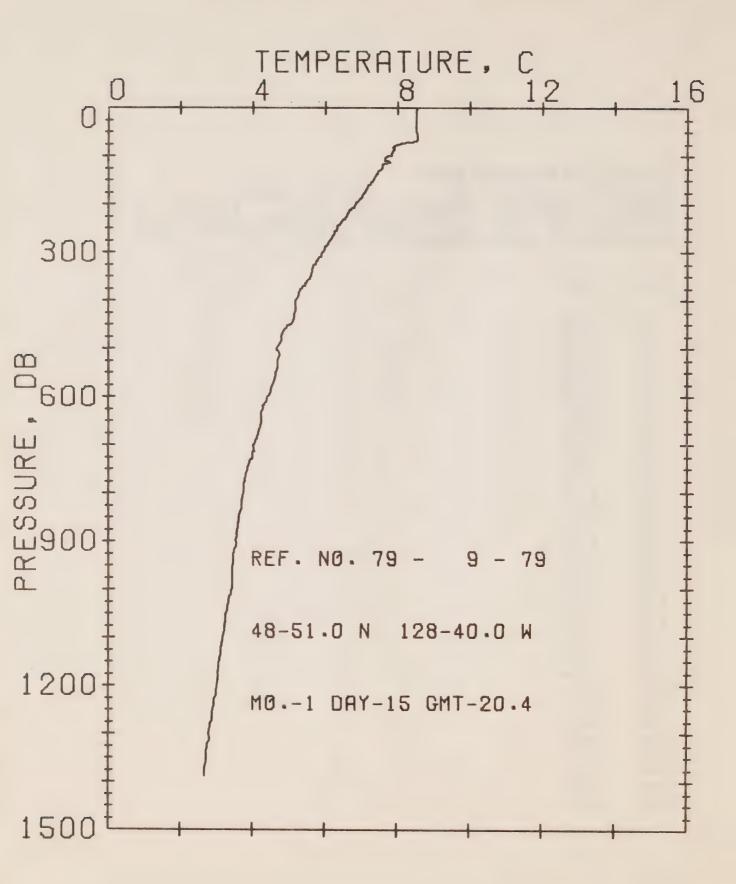
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 78 DATE 15/ 1/80
POSITION 49- 2.0N, 130-40.0W GMT 13.7 STATION 6
RESULTS OF STP CAST 401 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
U	8.53
10	8.51
20	8.51
30	8.51
50	8.51
75	8.52
100	8.14
125	7.41
150	7.19
175	6.98
200	6.70
225	6.34
250	6.12
300	5.44
400	4.85
500	4.40
600	4.16
800	3.78
1000	3.15
1200	2.89



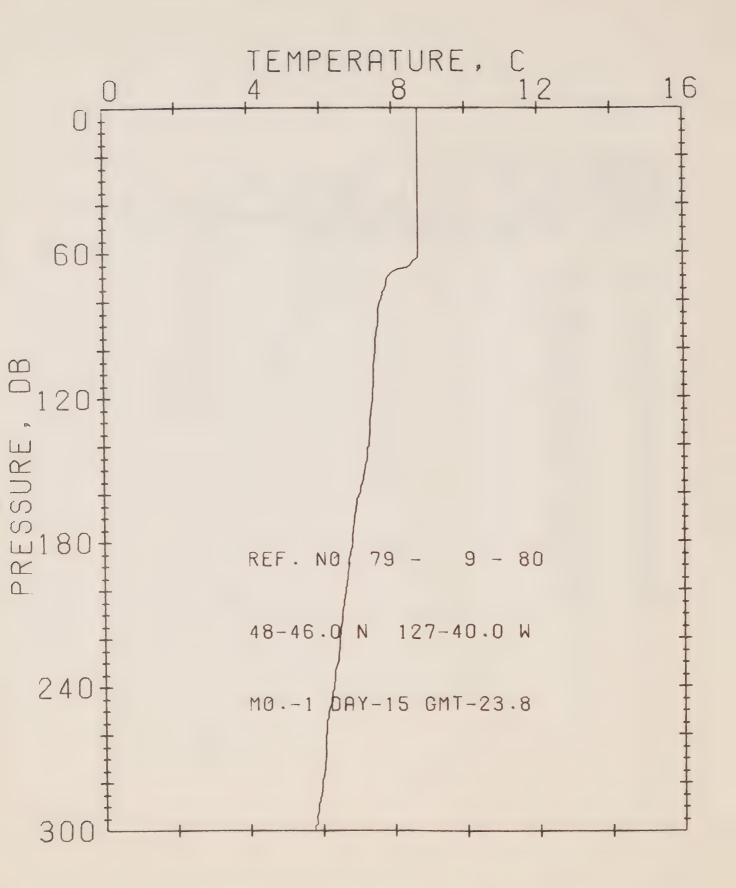
OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 79 DATE 15/ 1/80
POSITION 48-51.0N, 128-40.0W :GMT 20.4 STATION 5
RESULTS OF STP CAST 179 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	8.53
10	8.52
20	8.52
30	8.52
40	8.52
50	8.52
60	8.54
70	8.50
80	7.93
90	7.89
100	7.75
110	7.64
120	7.60
130	7.52
140	7.43
150	7.35
160	7.26
170	7.15
180	7.07
190	6.97
200	6.86
210	6.72
220	6.64
230	6.56
240	6.46
250	6.35
260	6.26
270	6.20
280	6.11
290	6.02
300	5.98



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 79 DATE 15/ 1/80
POSITION 48-51.0N. 128-40.0W GMT 20.4 STATION 5
RESULTS OF STP CAST 432 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED. PRESSURES ARE INPUT

PRESS	TEMP
0	8.53
10	8.52
20	8.52
30	8.52
50	8.52
75	8.09
100	7.75
125	7.59
150	7.35
175	7.12
200	6.86
225	6.61
250	6.35
300	5.98
400	5.19
500	4.69
600	4.43
800	3.74
1000	3.44
1200	3.00



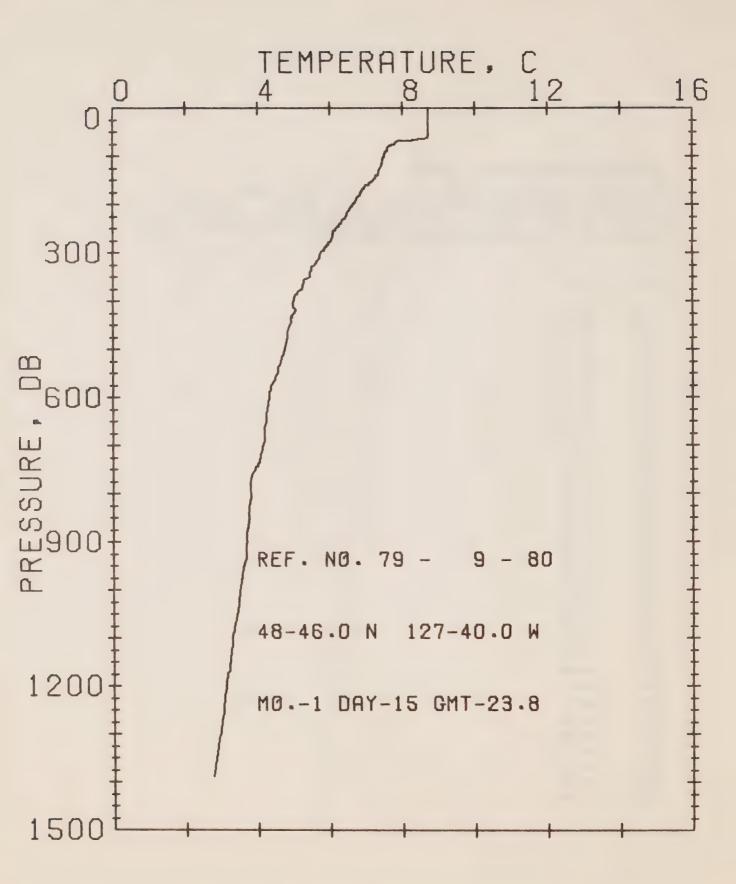
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 80 DATE 15/ 1/80

POSITION 48-46.0N. 127-40.0W GMT 23.8 STATION 4

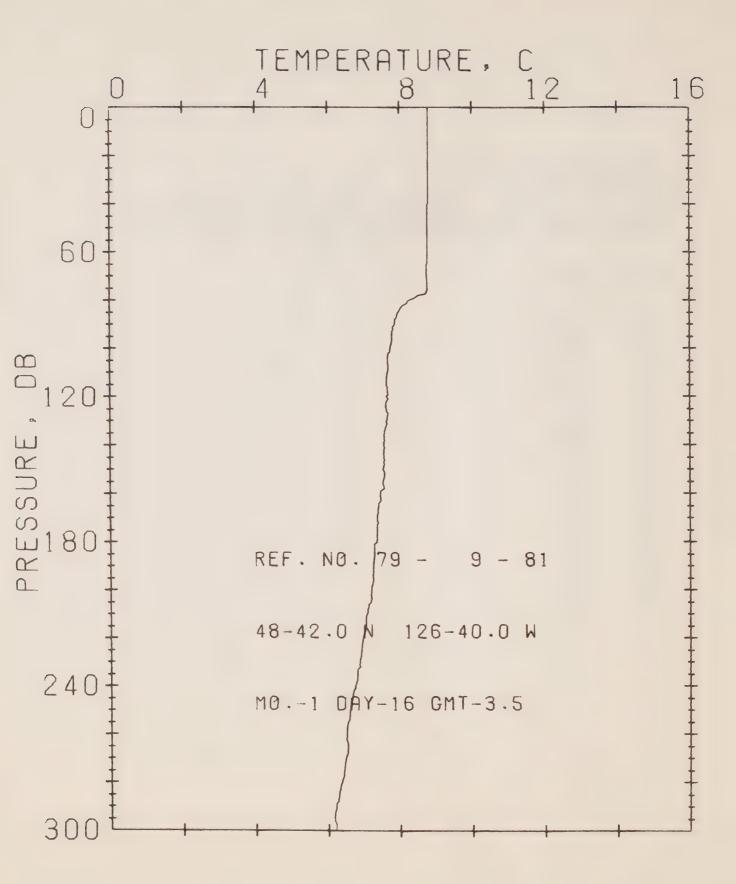
RESULTS OF STP CAST 176 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP
0	8.72
10	8.72
20	8.71
30	8.71
40	8.71
50	8.71
60	8.71
70	7.88
80	7.66
90	7.60
100	7.51
110	7.46
120	7.44
130	7.37
140	7.32
150	7.22
160	7.06
170	6.92
180	6.85
190	6.75
200	6.67
210	6.57
220	6.48
230	6.43
240	6.31
250	6.15
260	6.08 6.07
270	
280 290	5•98 5•87
300	5.76
300	3.70



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 80 DATE 15/ 1/80
POSITION 48-46.0N, 127-40.0W GMT 23.8 STATION 4
RESULTS OF STP CAST 434 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	8.72
10	8.72
20	8.71
30	8.71
50	8.71
75	7.79
100	7.51
125	7.40
150	7.22
175	6.87
200	6.67
225	6.46
250	6.15
300	5.76
400	5.00
500	4.75
600	4.31
800	3.81
1000	3.50
1200	3.10



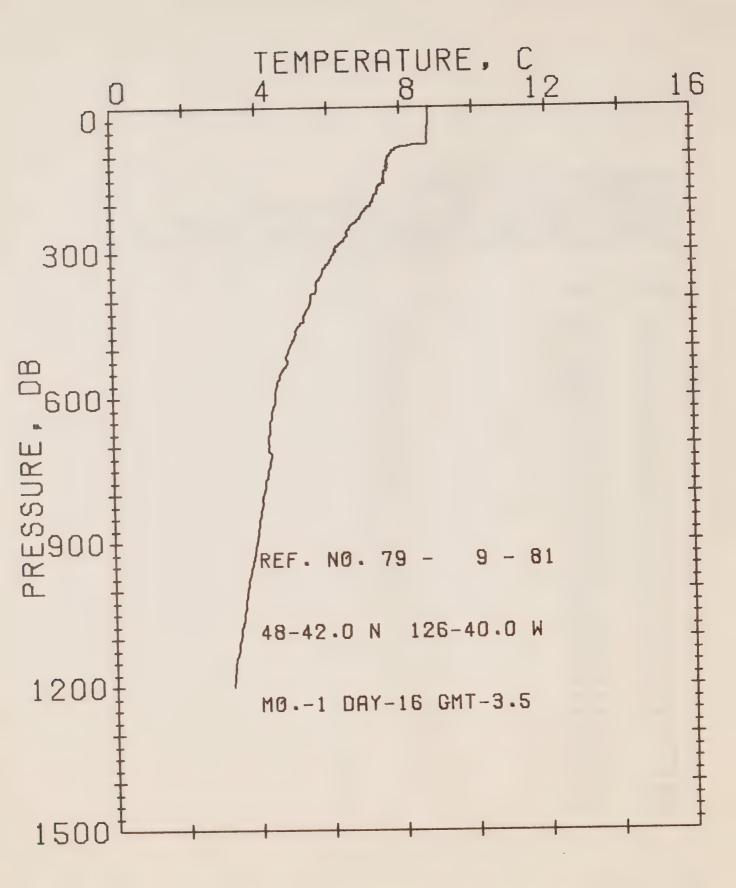
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 81 DATE 16/ 1/80

POSITION 48-42.0N, 126-40.0W GMT 3.5 STATION 3

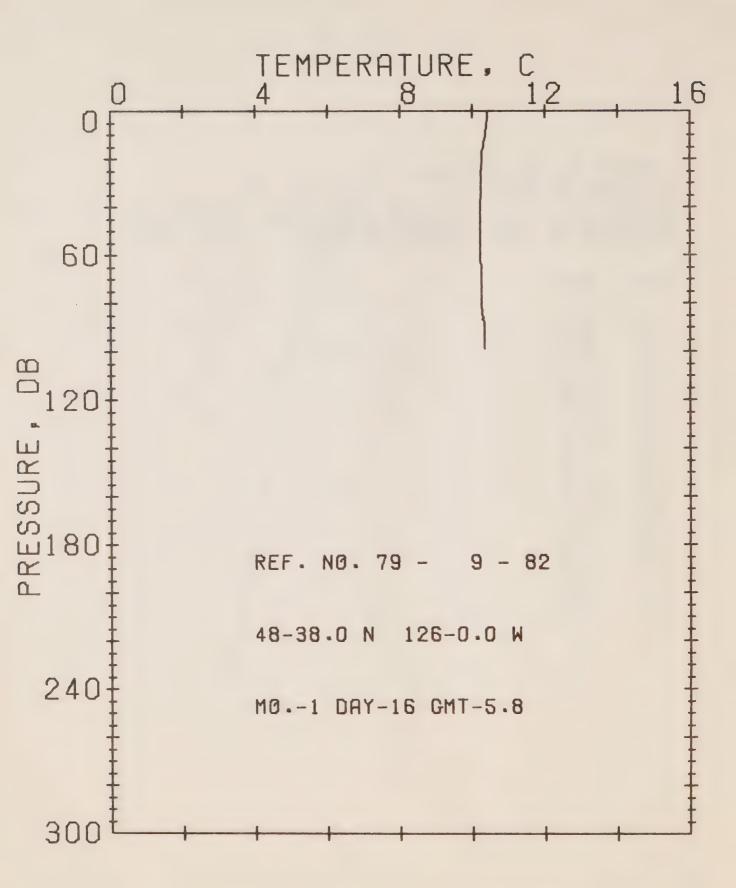
RESULTS OF STP CAST 187 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	8.79
10	8.79
20	8.79
30	8.79
40	8.78
50	8.78
60	8.77
70	8.76 8.23
80	
90	7.86
100	7.72
110	7.65
120	7.62
130	7.63
140	7.54
150	7.53
160	7.46
170	7.36
180	7.35
190	7.24
200	7.21
210	7.07
220	6.97
230	6.88
240	6.76
250	6.61 6.50
200 270	6.48
280	6.38
290	6.21
300	6.19
300	0.13



OFFSHORE OCEANOGRAPHY GROUP
REFERENCE NO. 79- 9- 81 DATE 16/ 1/80
POSITION 48-42.0N, 126-40.0W GMT 3.5 STATION 3
RESULTS OF STP CAST 391 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	8.79
10	8.79
20	8.79
30	8.79
50	8.78
75	8.77
100	7.72
125	7.63
150	7.53
175	7.35
200	7.21
225	6.93
250	6.61
300	6.19
400	5.50
500	4.88
600	4.48
800	4.14
1000	3.65
1200	3.23



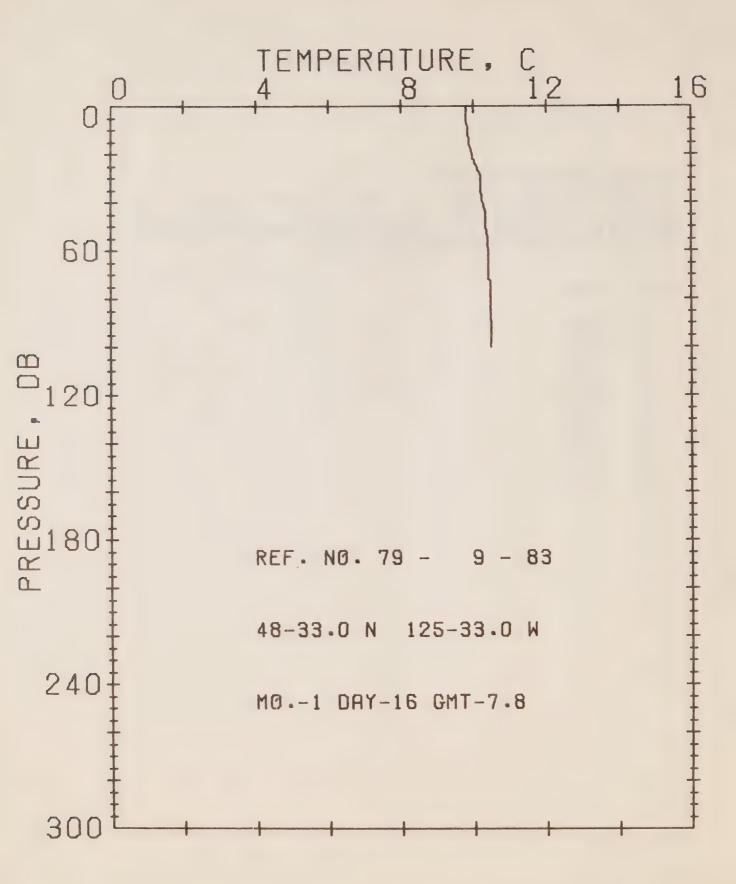
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 82 DATE 16/ 1/80

POSITION 48-38.0N. 126- .0W GMT 5.8 STATION 2

RESULTS OF STP CAST 71 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED.PRESSURES ARE INPUT

PRESS	TEMP		
0	10.43		
10	10.38		
20	10.27		
30	10.24		
40	10,22		
50	10.22		
60	10.22		
70	10.23		
80	10.25		
90	10.32		
100	10.33		



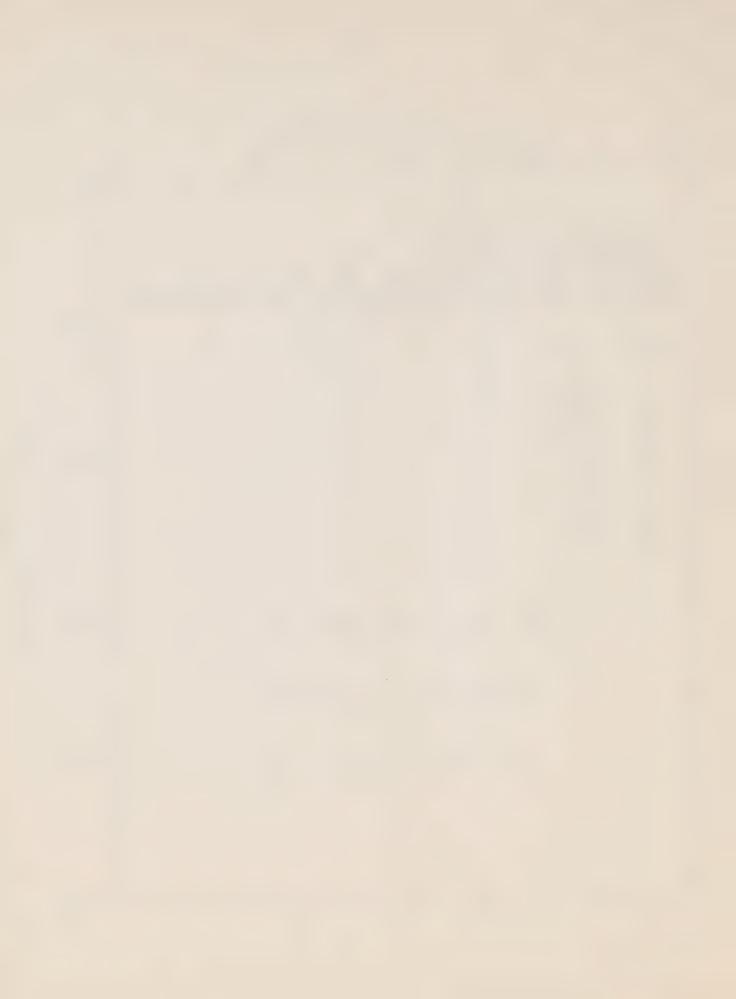
OFFSHORE OCEANOGRAPHY GROUP

REFERENCE NO. 79- 9- 83 DATE 16/ 1/80

POSITION 48-33.0N, 125-33.0W GMT 7.8 STATION 1

RESULTS OF STP CAST 86 POINTS TAKEN FROM ANALOG TRACE
GUILDLINE WAS USED, PRESSURES ARE INPUT

PRESS	TEMP
0	9.80
10	9.84
20	9.94
30	10.18
40	10.25
50	10.33
60	10.39
70	10.41
80	10.44
90	10.47
100	10.46



Surface Salinity and Temperature Observations (P-79-9)

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS CHUISE REFERENCE NUMBER 79- 9

DATE/TIME	SALINITY	TEMP	LONGITUDE
YR MO DY GMT	0/00	C	WEST
79 12 1 0	31.766*	· ·	123-30
79 12 1 0	31.468*		124- 0
79 12 1 520	31.499*		124-30
79 12 1 645	31.423*		125- 0
79 12 1 835	31.435*		125-33
79 12 1 1000	32.389*		126- 0
79 12 1 1130	32.358*	9.3	126-40
	32.218*	7•0	127-40
	32.472*		128-40
79 12 1 2240	32.444*		130-40
79 12 2 145	32.351*		131-40
79 12 2 445	32.502*		132-40
79 12 2 1040	32.547*		134-40
79 12 2 1340	32.381*		135-40
79 12 2 1635	32.430		136-40
79 12 2 2250	32.273		138-40
79 12 3 515	32.505		140-40
79 12 4 0		8 • 0	143-30
79 12 5 0	32.592*	7.9	145- 0
79 12 6 0	32.588*	8 • 0	ON STATION
79 12 7 0	32.567	8 • 0	ON STATION
79 12 8 0	32.581	8 • 0	ON STATION
79 12 9 0	32.585	7.8	ON STATION
79 12 10 0	32.586	7 • 8	ON STATION
79 12 11 0	32.590	7.7	ON STATION
79 12 12 0	32.583	7.7	ON STATION
79 12 13 0	32.587	7.8	ON STATION
79 12 14 0	32.584	7 • 8	ON STATION
<b>7</b> 9 <b>1</b> 2 <b>1</b> 5 <b>0</b>	32.596	7.7	ON STATION
79 12 16 0	32.579*	7.4	ON STATION
79 12 17 0	32.588	7.5	ON STATION
79 12 18 0	32.598	7.6	ON STATION
79 12 19 0	32.594	7.4	ON STATION
79 12 20 0	32.583	7.5	ON STATION
79 12 21 0	32.589	7.4	ON STATION
79 12 22 0	32.599	7.4	ON STATION
79 12 23 0	32.593	7.2	ON STATION
79 12 24 0	32.641*	7.2	ON STATION
79 12 25 0	32.609	6.9	ON STATION
79 12 26 0	32.660*	7.1	ON STATION
79 12 27 0	32.613	7.0	ON STATION
79 12 27 0	32.613	6.9	
	32.611	7.0	ON STATION
79 12 30 0	32.618	6.9	ON STATION

SURFACE SALINITY AND TEMPERATURE OBSERVATIONS CRUISE REFERENCE NUMBER 79- 9

D	ATE	<b>/</b> T]	ME	SALINITY	TEMP	LONGITUDE
YR	MO	DY	GMT	0/00	С	WEST
79	12	31	Ú	32.614	6.9	ON STATION
80	1	1	0	32.601	6.9	ON STATION
80	1	2	0		6.9	ON STATION
80	1	3	0	32.609	6.8	ON STATION
80	1	4	0	32.610	5.9	ON STATION
80	1	5	0	32.630	6.4	ON STATION
80	1	6	0	32.606	5.9	ON STATION
80	1	7	0	32.617	6.0	ON STATION
80	1	8	Û	32.621*	6.5	ON STATION
80	1	9	0	32.706*	6.8	ON STATION
80	1	10	0	32.637	6.6	ON STATION
08	1	11	0		6.7	ON STATION
80	1	12	U		6 • 3	ON STATION
80	1	13	0	32.640	6.4	145- 0
80	1	13	1800	32.634*	7.2	143-40
80	1	13	2330	32.579	7.2	142-40
80	1	14	640	32.581		140-40
80	1	14	1220	32.593		138-40
80	1	14	1800	32.542	8 • 5	136-40
80	- 1	15	25	32.516		134-40
80	1	15	630	32.597		132-40
80	1	15	1340	32.739		130-40
80	1	15	2025	32.503		128-40
80	1	15	2350	32.489		127-40
80	1	16	320	32.541		126-40
80	1	16	550	32.736		126- 0
80	1	16	730	32.116		125-33
80	1	16	930	31.527		125- 0
80	1	16	1100	30.437		124-30
80	1	16	1242	30.743		124- 0
80	1	16	1540	30.936		123-30

<sup>\*</sup> DENOTES SALINITY SAMPLE TAKEN FROM A BUCKET. ALL OTHER SAMPLES TAKEN FROM THE SEAWATER LOOP











